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THE STATUS OF AUDIOVISUAL PROGRAMS IN DIPLOMA AND JUNIOR

COLLEGE SCHOOLS OF NURSING IN ALBERTA IN 1969-70

by

© WILBERT LINTON DELAINEY

A THESIS

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The undersigned certify that they have read, and recommend
to the Faculty of Graduate Studies for acceptance a thesis
entitled "The Status of Audiovisual Programs in Diploma and Junior
College Schools of Nursing in Alberta in 1969-70" submitted by
Wilbert Linton Delainey in partial fulfilment of the requirements
for the degree of Master of Education.

ABSTRACT

The purpose of this study was to determine the status of the audiovisual programs in the seventeen Diploma and Junior College Schools of Nursing operating in Alberta prior to July 1970. The directors of all seventeen schools completed a survey-questionnaire and a non-directive approach interview. Four enrollment categories were established: 1-50; 51-100; 101-200 and over 200 students, and conclusions and recommendations were proposed based upon interpretation of the data.

Few schools reported formal existence or coordination of an audiovisual program. The directors generally assumed sole responsibility for coordination of their schools' audiovisual programs, including the preparation and expenditure of an unstructured audiovisual budget which existed in less than half the schools.

Most schools reported sharing audiovisual equipment, materials and facilities with the college, university or hospital used for nursing service and located audiovisual equipment and materials in areas separate from their libraries. Generally, as student enrollment increased, so did the variety and number of audiovisual equipment, materials and facilities. However, quantity and variety of audiovisual equipment, materials and facilities were generally greater for schools in a college, regardless of the size of student enrollment.

Physical facilities for classroom use of audiovisual equipment and materials were generally inadequate with room-darkening reported a major problem. Facilities, equipment and materials for the local preparation of instructional materials by instructors were almost non-existent.

Similarly, a comprehensive and up-to-date catalog of audiovisual equip-
ment and materials relevant or available to nursing education, or a reg-
ular schedule for maintenance, replacement, evaluation and selection of
them, were not maintained in most schools.

In-service programs were not regularly held in most schools and,
when held, were usually devoted entirely to equipment operation with
supervision by audiovisual salesmen. There was a general lack of audio-
visual resource people to consult with and assist nursing instructors in
audiovisual matters, and a general lack of secretarial assistance avail-
able to the instructors. Student audiovisual assistants were almost
non-existent. Students also had very limited access to school audiovisual
equipment, materials and facilities.

Although larger schools generally reported a greater proportion of
nursing instructors with higher professional preparation, formal audio-
visual preparation of most nursing instructors was almost non-existent.

As viewed by the directors of the schools, major barriers to their
audiovisual programs were lack of money, lack of time for instructors to
explore audiovisual instructional techniques or to prepare audiovisual
materials, few good nursing education audiovisual materials available,
and the lack of audiovisual training of instructors in the operation and
utilization of equipment. Similarly, the directors indicated that school
administrators and instructors alike could benefit from professional
audiovisual consultation and guidance, perhaps in the form of a school
audiovisual coordinator, to improve their schools' audiovisual programs.

Where possible, the findings were compared with the Quantitative
Standards For Audiovisual Personnel, Equipment, And Materials in Elemen-
tary, Secondary, And Higher Education.

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Final appreciation must go to my wife, Kathy, for her assistance, encouragement and understanding.

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INTRODUCTION TO THE PROBLEM

I. INTRODUCTION

Modern educators should no longer be asking, "Can audiovisual media make a contribution to education?" but rather, "How can audiovisual media best be utilized?"

The editorial of a major Canadian nursing periodical recently acknowledged the value of audiovisual media to nursing education and voiced a need for the increased utilization of audiovisual media in Canadian nursing education:

> In hospitals, especially in the areas of patient care, it is not always feasible for students to question, experiment, or attempt to find out for themselves. And it is often impossible for 30 or more students to give care to the one patient in hospital who has the disease being discussed in class. This challenges the nursing instructor to teach without jeopardizing the patient's safety. Audiovisual aids are currently recognized as the best solution to these situations (Zilm, 1968, p. 33).

The effectiveness of any nursing education program must ultimately be evaluated in terms of the capacity of its graduates in rendering safe and comprehensive care to the patient himself. But as the student nurse's contact with the patient becomes less frequent and of less duration, as seems to be the trend in many modern nursing education programs, it becomes evident that other means and methods must be integrated into the programs to present the student nurse with classroom instruction that simulates a dimension of reality and actual experience with the patient. Audiovisual media presently

appear to be the most promising way for nursing educators to solve this problem.

II. NEED FOR THE STUDY

The United States Department of Health, Education, and Welfare in a recent publication stated that there are four explosive influences at work on all educational institutions: the population explosion; the knowledge explosion; the psychology-of-learning explosion, and the instructional technology explosion about which was written:

> The whole complex of new audiovisual tools and technology offers exciting vistas for the improvement of the teaching and learning processes. At the moment these 'power tools to learning' are forcing a basic reevaluation of curriculum presentation. The planned integrated use of communications media can help re-fashion medical education for the benefit of those who teach and of students who learn under their direction (United States Department of Health, Education, and Welfare, 1967, p. xi).

The above quotation suggests that audiovisual media and technology should be integrated in curricula as means of solving individual instructional problems. However, James D. Finn, long a student of the development and promise of technology in all areas of education, suggests that audiovisual media and technology should be integrated in curricula as systematic approaches to all instructional problems, and writes:

> A new world...seems to be forming within the educational society. This world is technological in nature. Men are seeking to solve some of the problems of education by technological means. Technology is not, as many technically illiterate seem to think, a collection of gadgets, of hardware, of instrumentation. It is instead, best described as a way of thinking about certain classes of problems and their solutions (Finn, 1962, p. 129).

Nursing education is at a point in this so-called "instructional technology explosion" where it too must reevaluate its basic form and method of curriculum presentation. It must determine the present status of the audiovisual programs in its Schools of Nursing, carefully weigh the advantages and disadvantages of introducing new audiovisual medio into those programs, and then decide if, when, and how the appropriate audiovisual media can be introduced into its curriculum as integrated components of the overall nursing instructional program.

A study to determine the present status of audiovisual programs in Diploma and Junior College Schools of Nursing in the Province of Alberta can be justified by the following needs:

1. A review of the research and literature reveals that no study of this type has been carried out in the Province of Alberta.

2. The Committee on Nursing Education for the Province of Alberta, in its pamphlet Regulations Governing Schools of Nursing in the Province of Alberta, has stated in part that it requires full information as follows:

   Requirements and availability of teaching resources and facilities; the classrooms, conference rooms, office and secretarial space, library, and audio-visual equipment (Committee on Nursing Education for the Province of Alberta, 1970, p. 2).

   Although they require the above information, there have been no attempts to acquire it.

3. The Committee on Nursing Education also requires that

when an institution seeks approval for a total revision

of the nursing curriculum or the establishment of a new

School of Nursing, the information accompanying the

application must include in part:

Requirements and availability of teaching resources and facilities;
the classrooms, conference rooms, office and secretarial space,
library, audio-visual equipment (Committee on Nursing Education
for the Province of Alberta, 1970, p. 5).

    4. The Committee on Nursing Education further requires

that:

The library resources shall be adequate for the effective teaching
and study by faculty members and students.
    The library holdings shall include ... : Appropriate current
pamphlets and audio-visual material. Budgetary provision for
the selection and purchase of new holdings is essential. It is
suggested that a minimum of $10.00 per student, per year, be
budgeted for and spent on library resources, including books and
audio-visual equipment (Committee on Nursing Education for the
Province of Alberta, 1970, pp. 15-16).

This study could establish what budgetary provisions

for audio-visual equipment, materials and facilities

are made in Alberta's seventeen Schools of Nursing, as

there have been no attempts to acquire this information.

    5. The Advisor to the Schools of Nursing for the Province

of Alberta has expressed interest in the data to be

collected (See Appendix A page 132). It may serve as

a basis for assessing Provincial trends and needs in the

audiovisual programs in Diploma and Junior College

Schools of Nursing.

    6. If future studies are made, these data will serve as a

basis for comparison.

7. The findings of this study should assist nursing educators and administrators when initiating, expanding or evaluating a particular audiovisual program within a Diploma or Junior College School of Nursing in Alberta.

8. This study may serve to focus the attention of Diploma and Junior College Schools of Nursing administrators and instructors on the audiovisual program within their schools.

The purpose of this study is to determine the present status of audiovisual programs in Diploma and Junior College Schools of Nursing in the Province of Alberta and to make recommendations for improvement.

III. DELIMITATIONS OF THE STUDY

1. This study makes no attempt to evaluate the effectiveness of the use of audiovisual media in the Diploma and Junior College Schools of Nursing in the Province of Alberta.

2. The data collected pertain only to the seventeen Schools of Nursing in the Province of Alberta offering Diploma and Junior College Nursing Programs.

3. The information is as of Spring 1970, except for budget questions and some local production questions which specifically ask for information pertaining to the calendar year 1969.

4. In some instances, answers to questions involve an
    observation or estimate by respondents.

5. The inherent limitations of the questionnaire method
    of collecting data apply to this study, i.e. problem
    and bias of non-response, misinterpretation by respond-
    ents, possible processing errors and interpretation
    errors (Good, 1963, p. 270).

IV. ASSUMPTIONS

1. Audiovisual media are integral components of the
    educational process when properly utilized.

2. In the absence of a recognized list of nationally
    established standards for evaluating audiovisual
    programs in post-secondary institutions the size of
    most Diploma and Junior College Schools of Nursing,
    the Quantitative Standards For Audiovisual Personnel,
    Equipment, and Materials in Elementary, Secondary, and
    Higher Education (Faris and Sherman, 1966, pp. 1-21)
    (see Appendix E, page 161) are assumed to be one accepted
    criterion base which can be looked to for some guidance
    in comparing the audiovisual programs in Alberta's
    seventeen Schools of Nursing. Although these standards
    are for comprehensive post-secondary institutions
    offering many programs, it is further assumed that some
    meaningful comparisons can be made.

DEFINITION OF TERMS USED

For the purposes of this study, the following terms will be defined
as indicated:

1. Audiovisual: generally refers to experiences, equipment,
    and materials used for communication in instruction.
    Implies techniques based upon practices utilized in
    education and training (Brown et. al. 1969, p. 589).

2. Audiovisual Program: the overall plan to coordinate
    the utilization of audiovisual equipment, materials,
    facilities, budgets and personnel in instruction.

3. Audiovisual Coordinator: the person in the school
    appointed or selected to coordinate the audiovisual
    program within that school.

4. Audiovisual Committee: two or more faculty members,
    professional or technical staff acting in an advisory
    capacity in school audiovisual matters.

5. Non-directive approach interview: a nonstructured
    interview situation where definite subject-matter areas
    are involved, but the interviewer is largely free to
    arrange the form and timing of the questions. The
    nondirective approach as an uncontrolled or unstructured
    technique permits much freedom on the part of the
    respondent to 'talk about' the problems under study
    (Good, 1966, p. 292).

6. <u>In-Service</u> <u>Education</u>: "all activities engaged in by
   the professional personnel during their service and
   designed to contribute to improvement on the job
   (Erickson, 1968, p. 94)."

VI. ORGANIZATION OF THE STUDY

The remainder of this study is made up of five chapters.
Chapter II is a review of the related literature and research on
the significance of audiovisual media and technology to nursing
education and nursing educators. In chapter III, Design Of The Study,
Selecting The Population, Designing The Survey-Questionnaire,Collecting
The Data and Treatment Of The Data are described. Chapter IV reports
the findings as established by an analysis of the data collected by
the survey-questionnaire. Chapter V involves a comparison of the
findings wherever possible, using the <u>Quantitative</u> <u>Standards</u> <u>For</u>
<u>Audiovisual</u> <u>Personnel</u>, <u>Equipment</u> <u>and</u> <u>Materials</u> <u>in</u> <u>Elementary</u>, <u>Secondary</u>,
<u>and</u> <u>Higher</u> <u>Education</u> (Faris and Sherman, 1966, pp. 1-21). The final
chapter presents a summary of the findings, outlines the conclusions,
offers recommendations based upon the conclusions and offers suggestions
for further study.

CHAPTER II.

REVIEW OF THE RELATED LITERATURE AND RESEARCH

During the past quarter century, research in increasing amounts has demonstrated again and again the specific values of audiovisual media in instruction. In a summary statement prepared many years ago by Edgar Dale (1941), the Encyclopedia of Educational Research stated that the following claims for audiovisual media, when used adequately in the teaching situation, are supported by research:

1. They stimulate a high degree of interest in students--and interest is an important factor in learning.
2. They provide a concrete basis for the development of understandings and thought patterns, thereby reducing the number of purely verbalistic responses made by students.
3. They supply the basis for developmental learning and thereby make learning more permanent.
4. They provide experiences not easily secured in other ways and hence contribute to the depth and variety of learning.
5. They contribute to the growth of understanding, thereby contributing to vocabulary development.
6. They offer a reality of experiences which stimulates individual activity on the part of the learner.
7. They motivate students to investigate, thereby increasing voluntary reading (Dale, 1941, p. 1325).

The knowledge explosion is making it more necessary to find the most efficient means available for the transmission of information. Educational problems are being created by man's modern inventions and technology, but , says Dale (1969), this same industrial society has also provided the means for solving problems. Some of the means would include computers, programmed instruction, inexpensive paper-back books, radio, recordings, motion pictures and television... .

A revolutionary change will occur in the schools when audiovisual materials are closely coordinated and integrated with other media in communication (Dale, 1969, p. 9).

Many nursing instructors, administrators and medical personnel who are involved in the area of nursing education agree that nursing education must be part of this revolutionary change mentioned by Dale. Schweer (1968) writes:

> Utilization of a wide variety of communications media as an integral part of the total teaching-learning process may lead the way to creativity by offering students opportunities to pursue individual inquiry along with tutorial assistance from truly expert teachers who do not impose their view and attitudes on the students. We now are at a point in time that suggests the need for greater flexibility in the development of a wide range of teaching techniques, approaches, and activities as opposed to substitution of a 'new' technique for an old one. There is need for teachers to look at themselves in terms of how to plan under variations and adaptable patterns of teaching strategies (Schweer, 1968, p. 144).

However, interest in "communications media" even by all nursing instructors, administrators and medical personnel, will only go so far towards assuring effective integration of the media into nursing education programs. Research in use of media in nursing education or nursing service is very limited indeed. One looks in vain through nursing texts, periodicals, and research abstracts for such accounts. This does not mean that interest and concern does not exist. Shirley Post (1969) in an article entitled Nursing Education and Service claims that most nursing educators have accepted the fact that they must revise their patterns of education for nurses. They realize that in a world of fast moving technological change, the old apprenticeship method of passing along nursing skills is no longer adequate. Miss

Post is shocked by how little research is done in either nursing education or nursing service in Canada (Post, 1969, p. 35).

Only recently have medical educators intensely researched the educational value of audiovisual media in various branches of the medical profession. A publication of the United States Department of Health, Education and Welfare states that most of the claimed advantages of audiovisual media which have been revealed through research can be found in the following list:

1. Visual messages illustrate and clarify non-verbal symbols and images, complex relationships, quantitative relationships, abstract concepts, spatial relationship and specific details.
2. They provoke and hold attention.
3. They bring expert resources to the student audience.
4. They show inaccessible processes, materials, events, stages, and phase changes in time and place.
5. They promote efficiency in the acquisition and retention of learning.
6. They facilitate the exposition of changes in information, attitudes, behavior and moods.
7. They permit joint perception and can improve group relationships.
8. They facilitate accuracy and standardization of the message intended.
9. They create emotional involvement on the part of the learner.
10. They show size, colour and texture.
11. They constitute a more universal language than words.
12. They provide objectivity to a delicate or controversial subject.
13. They allow the audience to view an object or process from a variety of reference points.
14. They can economize the effort of understanding.
15. They allow a variety of modes of presentation.
16. They reinforce verbal messages.
17. They promote security--a feeling that the message is true.
18. They are repeatable and durable.
19. They promote the speaker's self-confidence.
20. They increase the prestige of the speaker (Markee, 1967, p. 21).

Descriptions such as the one above, of research verifying the

fact that audiovisual materials have educational value when adequately used in teaching and learning are plentiful. However, Ralph P. Creer (1969) warns nursing educators to remember that the only possible judgment that can be made concerning the effectiveness of an audio-visual presentation or any other instructional technique, is the answer to the question: "What effect did its use have on the student (Creer, 1969, p. 61)?" It is the student's reaction that determines the success or failure of an audiovisual presentation or any other instructional technique.

Sholis and Bragdon (1961) reported that without a doubt, actual experiences in nursing are the best learning situations: however, to master a particular step in the ladder of total learning, an artificial aid may be the most helpful and best available device. Nursing educators are reminded daily of the impact of the growing body of knowledge in such fields as basic sciences, medicine and education. Much of the knowledge explosion touches the practice of nursing in two dimensions: (1) application of an infinite variety of the techno-logical advances to direct patient care, and (2) development and utilization of new teaching methods and devices (Sholis and Bragdon, 1961, p. 97).

The value and importance of audiovisual media and materials have been recognized by nursing educators and authors for some time. For instance, Brethorst (1949) when outlining a section in her book Desirable Features of An Educational Unit For A School of Nursing, wrote:

In addition to furniture... and the equipment used in science laboratories and the nursing arts practice unit, schools should be supplied with audiovisual aids. These comprise all the devices which are employed to objectify what is to be learned, so that the details of the subject may be clarified by focusing interest, intensifying attention and giving to the observer a clear concept (Brethorst, 1949, p. 11).

Nursing educators in today's Schools of Nursing voice a similar need for more audiovisual media in schools and seem to be convinced of their effectiveness in the teaching of nursing. Kataoka and Robinson (1966) write: "Nurses responsible for nursing service, as well as nursing educators find that the use of audiovisual aids is essential to their teaching (Kataoka and Robinson, 1966, p. 49)." Kathryn Linden (1969) claims that:

...audiovisual media enrich curriculums, provide authentic instruction where there is a shortage of teachers, and help to bring practicing registered nurses up to date on clinical advances. Moreover, research has shown that audiovisual instruction--linked with conventional instruction--accelerates learning. A multimedia approach to teaching orchestrates instruction like music, and adds greatly to the significant learning achieved. Audiovisual media have indeed given new eyes to nursing. Beyond this, the best of them expand vision, and motivate learners to higher standards in nursing, or to surer application of nursing standards (Linden, 1969, p. 36).

But it is not enough for a nursing instructor just to know that audiovisual media are important and indispensible as teaching and learning instruments, or just to know all the instructional media and materials which are available to her. This view was summed up many years ago by Heidgerken (1946) who wrote:

It is necessary that the teacher know the fundamental principles underlying each so that she can utilize the aid economically and advantageously. Teaching aids cannot be used to substitute or supplant the teacer, nor are they merely supplementary devices. They are an integral part of the teaching process itself. The effectiveness of teaching aids is entirely dependent on how well

they are correlated and integrated with other materials of
instruction (Heidgerken, 1946, p. 367).

The above review of related literature and research has
attempted to emphasize the fact that many nursing educators are aware
of the significance and value of audiovisual media and technology to
nursing education. At a time when the most efficient means must be
found to transmit the vast amounts of information available in the
medical field, nursing educators are beginning to realize that effective
use of audiovisual media have almost unlimited instructional possibil-
ities. Audiovisual media can present the student nurse with instruc-
tion that simulates the dimension of reality and actual experience
with the patient at a time when direct student-patient contact is
becoming less frequent and of less duration.

CHAPTER III.

DESIGN OF THE STUDY

The purpose of this descriptive-survey study (Good, 1966) was to determine the present status of audiovisual programs in Diploma and Junior College Schools of Nursing in the Province of Alberta, to compare this status wherever possible with the Quantitative Standards For Audiovisual Personnel, Equipment and Materials in Elementary, Secondary and Higher Education (Faris and Sherman, 1966, pp. 1-21) and to make recommendations based upon an analysis of the findings. This chapter outlines the method and procedures employed to conduct this study; Selecting The Population, Designing The Questionnaire, Collecting The Data and Treatment Of The Data.

I. SELECTING THE POPULATION

The population included the seventeen Diploma and Junior College Schools of Nursing in operation in the Province of Alberta as of Spring 1970 that are governed by the Committee on Nursing Education of the Universities Co-ordinating Council of Alberta. Schools under construction, being completed or being occupied for the first time in the 1969-70 school year were excluded.

In order to determine the present status of audiovisual programs in Alberta's Diploma and Junior College Schools of Nursing, it was decided to survey all seventeen of the schools in the province regardless of the size of enrollment.

It was recognized that the survey-questionnaire (See Appendix B, page 134) could most easily have been completed by the audiovisual coordinator or librarian in each school since most of the items were related to audiovisual media, instruction and programs. However, since it was also recognized that some schools may not have persons filling these positions, the director of each School of Nursing was asked to complete the survey-questionnaire.

The names and addresses of the Schools of Nursing (See Appendix C, page 156) and the names of their directors were contained in a list prepared by the Advisor to Schools of Nursing for the Province of Alberta. Names of the directors of the schools are not given in this list as agreed upon by the respondents and by the investigator of this study.

II. DESIGNING THE SURVEY-QUESTIONNAIRE

Following careful study of a number of survey instruments, and after a number of "nondirective interviews" as described by Good (1966), with nursing instructors presently teaching in Schools of Nursing in Alberta, an initial survey-questionnaire was developed.

The items of the questionnaire were critically evaluated by three Department of Secondary Education faculty members at the University of Alberta, by a nursing educator and by the Advisor to Schools of Nursing for the Province of Alberta. After a third revision took place in consultation with two members of the thesis committee and with the Advisor to Schools of Nursing, the survey-questionnaire was assembled for distribution. Each of the seventeen

survey-questionnaires was coded by the investigator in order to keep all responses obtained in the study confidential.

III. COLLECTING THE DATA

The survey-questionnaire was delivered to the seventeen Diploma and Junior College Schools of Nursing in this study in June 1970. Accompanying the survey-questionnaire was a covering letter (See Appendix A, page 132) explaining the purpose and importance of the study, along with a self-addressed-stamped card (See Appendix D, page 159). Appointments were made by telephone for interviews with the directors of the seventeen schools. Schools which had not returned the self-addressed-stamped card were sent another survey-questionnaire.

The non-directive approach interviews with each of the seventeen directors of the schools allowed free discussion of problems they may have encountered when completing the survey-questionnaire. The survey-questionnaire was also picked up by the investigator at that time.

IV. TREATMENT OF THE DATA

Four enrollment groups were established, one to fifty, fifty-one to one hundred, one hundred-one to two hundred, and over two hundred students. Each completed survey-questionnaire was placed in one of the four enrollment groups.

The forty-nine items of the survey-questionnaire were divided into two groups for analysis: Thirty-three multiple choice items

and sixteen numerical response items. All these data were then
tabulated by enrollment groups to facilitate comparison of all Schools
of Nursing audiovisual programs according to the size of enrollment.

CHAPTER IV

REPORT OF THE FINDINGS

In this chapter the data gathered in order to determine the
present status of audiovisual programs in Diploma and Junior College
Schools of Nursing in the Province of Alberta are summarized and
tabulated. The headings under which the information is presented
include: general information and organization, facilities, budget,
audiovisual inventory, personnel, local production, in-service,
barriers to the audiovisual program and evaluation. Although the
Quantitative Standards for Audiovisual Personnel, Equipment, and
Materials In Elementary, Secondary, and Higher Education were used
as a reference in the planning stages of this study, it was not
possible to collect data suitable for direct comparison with them
in many cases.

I. GENERAL INFORMATION AND ORGANIZATION

All seventeen, or 100 per cent, of the Diploma and Junior
College Schools of Nursing in the Province of Alberta completed and
returned the survey-questionnaire. Ten schools offered a Diploma
Nursing Program conducted under the administrative control of a
hospital governing board, four offered a Diploma Nursing Program in
a college, two offered a Psychiatric Nursing Program conducted under
the administrative control of a hospital governing board, and one
school offered a Baccalaureate Degree Nursing Program organized and

controlled as a unit in a University. However, one school which
classified itself as offering a Diploma Nursing Program in a college
was actually in a state of transition and was therefore considered to
offer a Diploma Nursing Program conducted under the administrative
control of a hospital governing board for purposes of this study
only.

The seventeen Diploma and Junior College Schools of Nursing
were divided into four groups according to enrollment. Four schools
had student enrollments of one to fifty, seven schools had enrollments
between fifty-one and one hundred, two enrollments between one hundred-
one and two hundred, and four of the schools had enrollments in excess
of two hundred students.

The survey-questionnaire requested that the director of the
School of Nursing complete the instrument. However, those people
who assumed the directorships may have possessed titles other than
the director of the School of Nursing. Those titles included:
Director of Nursing Education; Director of the School of Nursing;
Chairman, Department of Nursing Education; Director of Nursing Program;
Director of Nursing; Acting Associate Director of Nursing Education;
Director of Health and Social Sciences; Associate Director of
Education; and Associate Director of Nursing Education.

Table I reports the position of the person who assumed main
responsibility for coordination of the school's audiovisual program
in each of the four enrollment groups. An audiovisual coordinator
assumed main responsibility for coordination of the audiovisual
program in one of the seventeen schools. Four schools reported no

TABLE I

PERSONNEL COORDINATING AUDIOVISUAL PROGRAM

Item 1-5: Who assumes <u>main</u> responsibility for coordination of the A.V. Program?

Coordinates A.V. Program	Enrollment Groups				TOTAL
	I (1-50) 4 schools (4 responding)	II (51-100) 7 schools (7 responding)	III (101-200) 2 schools (2 responding)	IV (over 200) 4 schools (4 responding)	17 schools (17 responding)
Director of School	1	1	0	1	3
A.V. Committee	0	1	0	1	2
Librarian	0	2	1	1	4
A.V. Coordinator	1	0	0	0	1
No one	1	3	0	0	4
Other	1	0	1	1	3
TOTAL	4	7	2	4	17

one to coordinate the audiovisual program. All four of these schools

had enrollments of one hundred students or less. Of the remaining

twelve schools which reported having someone to assume main responsibil-

ity for coordination of their audiovisual program, four reported the

librarian, three the Director, and two schools reported the audiovisual

committee. The three "other" responses included a clinical coordin-

ator, faculty, and the director and faculty.

As seen in Table II, seven schools reported never having

formal coordination of their audiovisual program, while three schools

reported having formal coordination "ever since it began operation".

"Other" responses for the remaining seven schools are reported in

Appendix C along with other pertinent information pertaining to all

seventeen of the Diploma and Junior College Schools of Nursing in

the Province of Alberta (see Table LII, page 156).

As indicated in Table III, only five of the seventeen schools

reported having an audiovisual committee in some form, while audio-

visual committees did not exist in twelve of the schools. Table IV

shows that of the five schools which did have an audiovisual committee,

none reported that the audiovisual committee served little purpose.

Four of the five schools reported that their audiovisual committee

was composed of school faculty members, and two of the five schools

reported having audiovisual committee members from other departments

or sources outside the schools.

As seen in Table V, six schools reported one central area or

classroom separate from the library in which to locate their audiovisual

TABLE II

LENGTH OF TIME OF FORMAL COORDINATION OF AUDIOVISUAL PROGRAM

Item 1-6: How many years has your school had [formal] coordination of an A.V. program?

| Length of Time of Formal Coordination | Enrollment Groups | | | | TOTAL |
	I (1-50) 4 schools (4 responding)	II (51-100) 7 schools (7 responding)	III (101-200) 2 schools (2 responding)	IV (over 200) 4 schools (4 responding)	17 schools (17 responding)
Ever since it began operation	1	2	0	0	3
Never had coordination	2	3	1	1	7
Other	1	2	1	3	7
TOTAL	4	7	2	4	17

TABLE III

AUDIOVISUAL COMMITTEES IN SCHOOLS

Item 1-7: An A.V. committee (CIRCLE ALL THAT APPLY)

An A.V. Committee	Enrollment Groups				TOTAL
	I (1-50) 4 schools (4 responding)	II (51-100) 7 schools (7 responding)	III (101-200) 2 schools (2 responding)	IV (over 200) 4 schools (4 responding)	17 schools (17 responding)
Does not exist	2	7	1	2	12
Exists in "some" form	2	0	1	2	5
TOTAL	4	7	2	4	17

TABLE IV

PERSONNEL ON AUDIOVISUAL COMMITTEE

Item 1-7: An A.V. committee (CIRCLE ALL THAT APPLY)

An A.V. Committee*	Enrollment Groups				TOTAL
	I (1-50) 4 schools (2 responding)	II (51-100) 7 schools (0 responding)	III (101-200) 2 schools (1 responding)	IV (over 200) 4 schools (2 responding)	17 schools (5 responding)
Exists, but serves little purpose	0	0	0	0	0
Is made up of school faculty	1	0	1	2	4
Includes people other than school faculty	1	0	0	1	2

*Includes only schools which indicated having an A.V. committee

equipment and materials. Another five schools reported locating their audiovisual equipment and materials in two or more areas strategically located throughout the school. Four schools reported locating their audiovisual equipment and materials in the library. The "other" responses reported by two schools specified that audiovisual equipment and materials were located in a room adjoining the library and in an audiovisual department.

The information recorded in Table VI indicates that ten of the seventeen Diploma and Junior College Schools of Nursing in Alberta shared centralized audiovisual equipment, materials, services and production facilities with nursing service personnel, or professional personnel, in the hospital used for nursing service. Four other schools reported similar sharing arrangements with other faculties in a college or university. The three "other" responses did not specify any other organizational arrangements for sharing audiovisual equipment and materials.

Table VII indicates that ten of the seventeen schools studied had a catalog of audiovisual materials. The remaining seven schools, all with student enrollments of less than one hundred, reported that a comprehensive and up-to-date catalog of audiovisual materials did not exist.

Table VIII reveals that five of the ten schools which had an audiovisual materials catalog had the school librarian maintain it. One school reported that instructors maintained an audiovisual materials catalog in their own subject area and another reported that the audiovisual committee maintained the audiovisual materials

TABLE V

LOCATION OF AUDIOVISUAL EQUIPMENT AND MATERIALS

Item 1-8: A.V. equipment and materials belonging to the school are located <u>mainly</u> in:

Location of Audiovisual Equipment and Materials	Enrollment Groups				TOTAL
	I (1-50) 4 schools (4 responding)	II (51-100) 7 schools (7 responding)	III (101-200) 2 schools (2 responding)	IV (over 200) 4 schools (4 responding)	17 schools (17 responding)
Library	0	1	0	3	4
One central area separate from the library	2	3	1	0	6
Two or more strategic locations	2	2	1	0	5
Other	0	1	0	1	2
TOTAL	4	7	2	4	17

TABLE VI

SHARED CENTRALIZED AUDIOVISUAL FACILITIES

Item 1-9: Centralized A.V. equipment, materials, services and production facilities are: (CIRCLE ALL
THAT APPLY)

Centralized A.V. Facilities	Enrollment Groups				TOTAL
	I (1-50) 4 schools (4 responding)	II (51-100) 7 schools (7 responding)	III (101-200) 2 schools (2 responding)	IV (over 200) 4 schools (4 responding)	17 schools (17 responding)
Shared with hospital personnel	2	5	2	1	10
Shared with other faculties in the college or university	1	2	0	1	4
Other	1	0	0	2	3
TOTAL	4	7	2	4	17

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TABLE VII

AUDIOVISUAL MATERIALS CATALOG

Item 1-1-: A comprehensive and up-to-date catalog of A.V. materials is maintained by:

An A.V. Materials Catalog	Enrollment Groups				TOTAL
	I (1-50) 4 schools (4 responding)	II (51-100) 7 schools (7 responding)	III (101-200) 2 schools (2 responding)	IV (over 200) 4 schools (4 responding)	17 schools (17 responding)
Exists in some form	1	3	2	4	10
Does not exist	3	4	0	0	7
TOTAL	4	7	2	4	17

catalog.

The information recorded in Table IX indicates that thirteen of the seventeen schools studied did not select audiovisual equipment and materials on a regular basis. Nine of those thirteen schools had an enrollment of one hundred students or less.

Table X indicates that some schools in enrollment groups II, III, and IV had more than one person involved in the selection of audiovisual equipment and materials, but only one person did the selection in each of the four schools in enrollment group I. The person most frequently reported to be involved in selection procedures was the director of the school. Eight schools indicated their director was involved in selection of audiovisual materials and equipment. Six schools reported faculty involved in selection and the librarian was reported by four schools. The one school that reported having an audiovisual coordinator also had that person involved in the selection of audiovisual equipment and materials. Audiovisual committees were involved in selection procedures in two schools. The five "other" responses specified that individual faculty members participated in selection of audiovisual equipment and materials, but did not have purchasing privileges.

Thirteen of the seventeen schools studied reported that the director of the school was involved in the purchase of audiovisual equipment and materials as indicated in Table XI. Only one school involved the audiovisual coordinator in the purchase of audiovisual equipment and materials and the librarian was able to purchase audiovisual equipment and materials in two of the seventeen schools.

TABLE VIII

MAINTAINING THE AUDIOVISUAL MATERIALS CATALOG

Item 1-10: A comprehensive and up-to-date catalog of A.V. materials is maintained by:

Maintains the A.V. Materials Catalog*	Enrollment Groups				TOTAL
	I (1-50) 4 schools (1 responding)	II (51-100) 7 schools (3 responding)	III (101-200) 2 schools (2 responding)	IV (over 200) 4 schools (4 responding)	17 schools (10 responding)
Librarian	0	2	1	2	5
A.V. committee	0	0	0	1	1
Instructors in their own subject areas	1	0	0	0	1
Other	0	1	1	1	3

*Includes only schools which indicated having an A.V. materials catalog

TABLE IX

SELECTION OF AUDIOVISUAL EQUIPMENT AND MATERIALS

Item 1-11: Selection of A.V. equipment and material is: (CIRCLE ALL THAT APPLY)

Selection of A.V. Equipment and Materials	Enrollment Groups				TOTAL
	I (1-50) 4 schools (4 responding)	II (51-100) 7 schools (7 responding)	III (101-200) 2 schools (2 responding)	IV (over 200) 4 schools (4 responding)	17 schools (17 responding)
Done at regular intervals	0	2	1	1	4
Not done at regular intervals	4	5	1	3	13
TOTAL	4	7	2	4	17

TABLE X

PERSONNEL SELECTING AUDIOVISUAL EQUIPMENT AND MATERIALS

Item 1-11: Selection of A.V. equipment and materials is [done by]: (CIRCLE ALL THAT APPLY)

Selects A.V. Equipment and Materials	Enrollment Groups				
	I (1-50) 4 schools (4 responding)	II (51-100) 7 schools (7 responding)	III (101-200) 2 schools (2 responding)	IV (over 200) 4 schools (4 responding)	TOTAL 17 schools (17 responding)
A.V. committee	1	0	0	1	2
A.V. coordinator	0	1	0	0	1
Director of School	1	3	1	3	8
Faculty who can purchase A.V. items	0	3	0	3	6
Librarian	1	1	1	1	4
Other	1	1	2	1	5

TABLE XI

PURCHASE OF AUDIOVISUAL EQUIPMENT AND MATERIALS

Item 1-12: Purchase of A.V. equipment and material is done by: (CIRCLE ALL THAT APPLY)

Purchases A.V. Equipment and Materials	Enrollment Groups				TOTAL
	I (1-50) 4 schools (4 responding)	II (51-100) 7 schools (7 responding)	III (101-200) 2 schools (2 responding)	IV (over 200) 4 schools (4 responding)	17 schools (17 responding)
Director of School	3	5	2	3	13
A.V. coordinator	0	1	0	0	1
Faculty members	1	0	0	0	1
Librarian	1	1	0	0	2
Other	2	2	0	1	5

The five "other" people who participated in audiovisual equipment and material selection included audiovisual committees, purchasing departments and business managers. Only one school reported that faculty could purchase audiovisual equipment and materials.

The information in Table XII describes the maintenance and replacement procedures for audiovisual equipment in Alberta's Diploma and Junior College Schools of Nursing. Eight schools reported that their audiovisual equipment was serviced regularly, but a similar number reported that their audiovisual equipment was only serviced when it was necessary. Six schools replaced audiovisual equipment when it became obsolete and one replaced its audiovisual equipment on a regular basis even if it was not obsolete. None of the seventeen schools reported its audiovisual equipment to be, for the most part, obsolete. In general it appeared that schools in enrollment groups I and II had a more organized procedure for maintenance and replacement of audiovisual equipment than those schools in enrollment groups III and IV. However, enrollment groups I and II also reported more servicing of their audiovisual equipment only when necessary than did enrollment groups III and IV.

The information recorded in Table XIII describes the organization of Alberta's seventeen Diploma and Junior College Schools of Nursing with respect to student access to audiovisual equipment and materials. Eight of the schools reported student access to audiovisual equipment and materials on a supervised basis. However, five schools reported that students had little or no access to audiovisual

TABLE XII

MAINTENANCE AND REPLACEMENT OF AUDIOVISUAL EQUIPMENT

Item 1-13: School A.V. equipment is: (CIRCLE ALL THAT APPLY)

A.V. equipment is:	Enrollment Groups				TOTAL
	I (1-50) 4 schools (4 responding)	II (51-100) 7 schools (7 responding)	III (101-200) 2 schools (2 responding)	IV (over 200) 4 schools (4 responding)	17 schools (17 responding)
Serviced regularly	2	3	1	2	8
Replaced when obsolete	3	2	0	1	6
Serviced only when necessary	2	4	1	1	8
Replaced regularly, even if it is not obsolete	0	1	0	0	1
Obsolete	0	0	0	0	0

TABLE XIII

STUDENT ACCESS TO AUDIOVISUAL EQUIPMENT AND MATERIALS

Item 1-14: Nursing students in this school have [access to A.V. equipment and materials]:

Student Access to A.V. Equipment and Materials	Enrollment Groups				TOTAL
	I (1-50) 4 schools (4 responding)	II (51-100) 7 schools (7 responding)	III (101-200) 2 schools (2 responding)	IV (over 200) 4 schools (4 responding)	17 schools (17 responding)
On same basis as library books	1	1	0	1	3
When supervised	2	2	2	2	8
Little or no access	1	3	0	1	5
Other	0	1	0	0	1
TOTAL	4	7	2	4	17

equipment and materials. Of those five schools, four were in enroll-
ment groups I and II. Three of the seventeen schools reported that
students had access to audiovisual equipment and materials on the
same basis as library books. Two of those three schools were in
enrollment groups I and II. The one "other" response was submitted
by a nursing school in a college which reported its students had
unsupervised access to audiovisual equipment and materials in the
college.

II. FACILITIES

Tables XIV through XVI illustrate the status of audiovisual
facilities in the Diploma and Junior College Schools of Nursing.

As shown in Table XIV, sixteen of the seventeen Diploma and
Junior College Schools of Nursing in the Province of Alberta had
libraries. Four of those sixteen schools reported having a combined
audiovisual-library location for the distribution and storage of
audiovisual equipment, materials and library books. Audiovisual
facilities which were reported as being separate from the school
library included audiovisual projection theatres in four schools,
audiovisual distribution and storage centers in six schools, and
audiovisual offices in three of the seventeen schools. Only one of
the seventeen schools reported having an audiovisual workroom or
other space designated for instructors to prepare their own audio-
visual materials. Adequate storage space for spare audiovisual
equipment, materials, supplies and replacement parts was reported
by eight of the seventeen schools. Five schools had equipped

TABLE XIV

SCHOOL AUDIOVISUAL FACILITIES

Item 2-1: Facilities in this school include: (CIRCLE ALL THAT APPLY)

School Facilities Include:	Enrollment Groups				TOTAL
	I (1-50) 4 schools (4 responding)	II (51-100) 7 schools (7 responding)	III (101-200) 2 schools (2 responding)	IV (over 200) 4 schools (4 responding)	17 schools (17 responding)
Library	3	7	2	4	16
Darkroom	1	2	1	1	5
A.V. projection theatre	0	2	1	1	4
A.V. office space	0	1	1	1	3
A.V. distribution and storage space separate from library	2	2	1	1	6
Combined A.V. and library distribution location	0	1	0	3	4

TABLE XIV (continued)

SCHOOL AUDIOVISUAL FACILITIES

| School Facilities Include: | Enrollment Groups | | | | TOTAL |
	I (1-50) 4 schools (4 responding)	II (51-100) 7 schools (7 responding)	III (101-200) 2 schools (2 responding)	IV (over 200) 4 schools (4 responding)	17 schools (17 responding)
Adequate A.V. storage	1	3	1	3	8
A.V. workroom for instructors	0	0	0	1	1
Wiring for closed-circuit television	0	1	0	2	3
Closed-circuit television	0	1	0	2	3
Electrically wired individual study carrels	0	1	0	0	1
Two-way sound system	0	0	0	1	1
Television studio	0	0	0	0	0

photographic darkrooms.

One school reported having electrically wired individual study carrels. Similarly, only one school had a two-way central sound system (intercom) with classroom control. Wiring for closed-circuit television and accompanying closed-circuit television facilities were reported in three schools, one in enrollment group II and two in enrollment group IV. None of the seventeen schools reported having television studio facilities.

Table XV reports the audiovisual facilities in instruction rooms, including the total per enrollment group. It was generally found that as school enrollment increased the number of instruction rooms also increased. Similarly, the number of selected audiovisual facilities in the instruction rooms also increased as the school enrollment increased.

Overall the schools in enrollment group III generally appeared to have the most adequately equipped instruction rooms in terms of the facilities specified in item 2-4 of the survey-questionnaire.

The general lack of room-darkening shades or drapes in instruction rooms was the main factor reported by eight of the seven-teen schools to hinder the use of audiovisual media in instruction rooms, as indicated in Table XVI. All four schools in enrollment group I reported this general lack of room darkening facilities. Inadequate ventilation during room darkening was reported by five schools. Poor acoustics, lack of convenient electrical outlets and poor radio and television reception were reported by two schools to hinder audiovisual media utilization. The one "other" response reported

TABLE XV

AUDIOVISUAL FACILITIES IN INSTRUCTION ROOMS

Item 2-4: How many classrooms, lecture halls, laboratories, seminar rooms, etc., have the following facilities:

Audiovisual Facilities	Enrollment Groups																					
	I (1-50)					II (51-100)								III (101-200)			IV (over 200)					
	SCHOOL				TOTAL	SCHOOL							TOTAL**	SCHOOL		TOTAL	SCHOOL					TOTAL**
	1*	2	3	4		5*	6*	7	8	9	10	11		12	13		14*	15	16	17		
Number of regular instruction rooms	2	3	3	2	10	7	-	10	4	6	5	3	35	7	4	11	-	12	16	9		37
Room darkening facilities	1	2	0	1	4	4	-	3	2	5	2	2	18	5	4	9	-	10	8	5		23
Permanently mounted projection screens	1	1	1	1	3	7	-	1	1	2	0	2	13	1	2	3	-	2	10	3		15
Front and rear room light controls	0	1	3	0	4	4	-	0	1	0	0	0	5	1	2	3	-	2	0	2		4
One electrical outlet on each wall	0	3	0	2	5	0	-	0	3	0	0	0	3	7	4	11	-	12	11	3		26
Adequate display space	0	3	0	2	5	6	-	0	1	0	1	0	8	7	4	11	-	12	0	9		21

*Indicates schools in a college   ** Total figures incomplete   -Indicates figures were not available

TABLE XVI

FACTORS HINDERING AUDIOVISUAL MEDIA UTILIZATION

Item 2-3: Which of the following factors hinder the use of records, tapes, radio, T.V., or projected materials in regular areas of instruction? (CIRCLE ALL THAT APPLY)

Factors Hindering A.V. Media Utilization	Enrollment Groups				TOTAL
	I (1-50) 4 schools (4 responding)	II (51-100) 7 schools (7 responding)	III (101-200) 2 schools (2 responding)	IV (over 200) 4 schools (4 responding)	17 schools (17 responding)
Poor acoustics	0	1	1	0	2
Lack of electrical outlets	0	2	0	0	2
Lack of room-darkening facilities	4	2	1	1	8
Poor radio and T.V. reception	0	2	0	0	2
Inadequate ventilation during room-darkening	2	1	1	1	5
Other	0	1	0	0	1

that difficulty in transporting equipment was a factor which hindered
utilization of audiovisual media in that school.

III. BUDGET

All data which were gathered concerning budgetary allotments
for Diploma and Junior College Schools of Nursing in Alberta were
for the calendar year 1969.

Table XVII shows that eight of the seventeen schools had
audiovisual budgets in one form or another for the calendar year
1969. Nine of seventeen schools reported that an audiovisual budget
did not exist in those schools.

The type of audiovisual budget reported by those eight
schools which had an audiovisual budget during the calendar year
1969 is presented in Table XVIII. None of the eight schools reported
an audiovisual budget which was calculated on a fixed amount per
pupil basis. However, three "other" responses, one in enrollment
group II and two in enrollment group IV, reported having an audio-
visual budget fixed at a certain amount yearly but not calculated
on a per pupil basis.

Six of the eight schools reported having an audiovisual
budget that was independent of the total library budget. Three of
those six schools were in enrollment group IV where the number of
students was over two hundred per school. One school reported that
the audiovisual budget was a percentage of the total library budget.

The people who prepared and expended audiovisual budgets for
the eight schools which had audiovisual budgets are described in

TABLE XVII

NUMBER OF SCHOOLS WITH AUDIOVISUAL BUDGETS

Item 3-1: In 1969, this school's A.V. budget for purchase of A.V. equipment and materials:

A 1969 A.V. Budget	Enrollment Groups				TOTAL
	I (1-50) 4 schools (4 responding)	II (51-100) 7 schools (7 responding)	III (101-200) 2 schools (2 responding)	IV (over 200) 4 schools (4 responding)	17 schools (17 responding)
Existed in some form	1	3	1	3	8
Did not exist	3	4	1	1	9
TOTAL	4	7	2	4	17

TABLE XVIII

TYPE OF AUDIOVISUAL BUDGET

Item 3-1: In 1969, this school's A.V. budget for purchases of A.V. equipment and materials: (CIRCLE ALL THAT APPLY)

Type of A.V. Budget*	Enrollment Groups				TOTAL
	I (1-50) 4 schools (1 responding)	II (51-100) 7 schools (3 responding)	III (101-200) 2 schools (1 responding)	IV (over 200) 4 schools (3 responding)	17 schools (8 responding)
Fixed amount per pupil	0	0	0	0	0
Was not fixed	1	1	1	1	4
Independent of library budget	1	1	1	3	6
Percentage of library budget	0	1	0	0	1
Other	0	1	0	2	3

*Includes only schools which indicated having an A.V. budget

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Tables XIX and XX respectively. The director of the school was the person most often reported to be involved in both the preparation and expenditure of the audiovisual budget. Seven of the eight schools reported that the director prepared the audiovisual budget and five reported that the director expended it. Only schools in enrollment group I reported that their director was not involved in the preparation of the audiovisual budget.

One school reported that the librarian was involved in preparation of the audiovisual budget and two schools reported their librarian was allowed to expend it. Two schools involved their audiovisual committee in both the preparation and expenditure of the audiovisual budget. Similarly, the one school which had an audio-visual coordinator involved that person in both preparation and expenditure of the audiovisual budget. Only one school in enrollment group IV reported that members of the administrative governing board were involved in expenditure of the audiovisual budget. No administrative governing boards were reported to be involved in preparation of the audiovisual budget in any of the seventeen schools studied.

Provisions of the audiovisual budget in the eight schools which reported audiovisual budgets are shown in Table XXI. The purchase of commercially prepared audiovisual materials e.g., educational films and payment for the rental of sixteen millimeter films was covered by the audiovisual budget in seven of the seventeen Diploma and Junior College Schools of Nursing. Six of the eight schools reported that their audiovisual budget provided for the purchase of expendable audiovisual supplies, equipment replacement

TABLE XIX

PEOPLE WHO PREPARE THE AUDIOVISUAL BUDGET

Item 3-2: Who prepared the 1969 A.V. budget for your school? (CIRCLE ALL THAT APPLY)

| Prepares A.V. Budget* | Enrollment Groups | | | | TOTAL |
	I (1-50) 4 schools (1 responding)	II (51-100) 7 schools (3 responding)	III (101-200) 2 schools (1 responding)	IV (over 200) 4 schools (3 responding)	17 schools (8 responding)
Director	0	3	1	3	7
Librarian	0	1	0	0	1
A.V. committee	1	0	0	1	2
A.V. coordinator	0	1	0	0	1
Other	0	1	0	0	1

*Includes only schools which indicated having an A.V. budget

TABLE XX

PEOPLE WHO EXPEND THE AUDIOVISUAL BUDGET

Item 3-3: Who expended the 1969 A.V. budget for your school? (CIRCLE ALL THAT APPLY)

Expends A.V. Budget*	Enrollment Groups				TOTAL
	I (1-50) 4 schools (1 responding)	II (51-100) 7 schools (3 responding)	III (101-200) 2 schools (1 responding)	IV (over 200) 4 schools (3 responding)	17 schools (8 responding)
Director	0	3	0	2	5
Governing Board	0	0	0	1	1
Librarian	0	1	0	1	2
A.V. committee	1	0	0	1	2
A.V. coordinator	0	1	0	0	1
Other	0	0	1	1	2

*Includes only schools which indicated having an A.V. budget

TABLE XXI

PROVISIONS OF THE AUDIOVISUAL BUDGET IN SCHOOLS WITH AN AUDIOVISUAL BUDGET

Item 3-4: The A.V. budget during 1969 provided for: (CIRCLE ALL THAT APPLY)

A.V. Budget* Makes Provisions for:	Enrollment Groups				TOTAL
	I (1-50) 4 schools (1 responding)	II (51-100) 7 schools (3 responding)	III (101-200) 2 schools (1 responding)	IV (over 200) 4 schools (3 responding)	17 schools (8 responding)
Purchase of commercial A.V. materials	1	3	1	2	7
Purchase of A.V. equipment	1	3	0	1	5
Postage and rental fees for items other than films	0	2	1	1	4
Film rental	0	3	1	3	7

*Includes only schools which indicated having an A.V. budget

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TABLE XXI (continued)

PROVISIONS OF THE AUDIOVISUAL BUDGET IN SCHOOLS WITH AN AUDIOVISUAL BUDGET

A.V. Budget* Makes Provisions for:	Enrollment Groups				TOTAL
	I (1-50) 4 schools (1 responding)	II (51-100) 7 schools (3 responding)	III (101-200) 2 schools (1 responding)	IV (over 200) 4 schools (3 responding)	17 schools (8 responding)
Purchase of local production supplies and equipment	0	2	1	2	5
Purchase of expendable supplies and replacement parts	0	3	1	2	6
Equipment servicing	0	2	0	2	4
Other	0	0	0	1	1

*Includes only schools which indicated having an A.V. budget

parts and materials as needed throughout the year. Five schools indicated that their audiovisual budget provided for the purchase of audiovisual equipment and local production supplies and equipment. Four of the eight schools with an audiovisual budget indicated it provided for the postage and rental fees for items other than films and for servicing of equipment by commercial maintenance personnel.

Table XXII reports the amounts of money allotted to the total library (printed materials) budget, total audiovisual budget, audiovisual equipment budget and audiovisual materials budget in each of the eight schools which reported the existence of an audiovisual budget in item 3-1 of the survey-questionnaire.

In reporting the amounts of money allotted for total library and audiovisual budgets in the eight schools, it was discovered that the three schools in a college included their audiovisual and library budgets in the college audiovisual and library budget. The investigator therefore deemed it necessary to treat budgetary data from those three schools separately from the data obtained from the other five schools.

IV. AUDIOVISUAL INVENTORY

This part of the study is divided into two sections. The first section reports the total units of audiovisual equipment which were owned by, or were available on loan to, each school in each of the four enrollment groups. The second section reports the total audiovisual materials which were owned by, or were available on loan to, each school in each of the four enrollment groups. All seventeen

TABLE XXII

GENERAL BUDGET

Items 3-5 through 3-8: What was your total library (printed materials budget)[also the total A.V. budget, A.V. equipment budget and A.V. materials budget] for the calendar year 1969?

Type of Budget*	Enrollment Groups							
	I (1-50) 4 schools (1 responding)		II (51-100) 7 schools (3 responding)		III (101-200) 2 schools (1 responding)		IV (over 200) 4 schools (3 responding)	
	COLLEGE	OTHER	COLLEGE	OTHER	COLLEGE	OTHER	COLLEGE	OTHER
Library	1. -		1. $52,000 2. $38,000	1. -		1. $1,088		1. $2,500 2. $1,800 3. $2,600
Audiovisual	1. -		1. $10,280 2. $58,000	1. $1,100		1. $188		1. $1,500 2. - 3. $1,000
Audiovisual Equipment	1. -		1. $5,000 2. $26,000	1. $1,050		1. -		1. - 2. - 3. -
Audiovisual Materials	1. -		1. $5,280 2. $5,250	1. $50		1. $27		1. - 2. - 3. -

*Includes only schools which indicated having an A.V. budget
-Indicates figures were not available

Diploma and Junior College Schools of Nursing were assigned identification numbers. Those same identification numbers were used when reporting both the total units of audiovisual equipment and the total audiovisual materials owned by, or available on loan to, the seventeen schools. Only schools in a college reported having the opportunity to borrow both audiovisual equipment and materials, presumably from the institutions' audiovisual media or resources centers.

Audiovisual equipment inventory. Tables XXIII through XXVI report the total number of units of audiovisual equipment which were owned by, or were available on loan to, each school in each of the four enrollment groups. For the fourteen schools which reported to own some or all of their audiovisual equipment, it was found generally that the larger the school enrollment, the greater the total units of audiovisual equipment owned by those schools. Similarly, the larger the school enrollment, the greater the number of different types of audiovisual equipment owned by individual schools.

Except for school five in Table XXIV, which reported to own a total of eight units of audiovisual equipment, none of the schools in a college reported owning audiovisual equipment. Three of the four schools in a college, schools five and six in Table XXIV and school fourteen in Table XXVI, had an exceptionally large total and selection of units of audiovisual equipment available on loan, when compared to schools which were not in a college and owned all their audiovisual equipment. For instance, school six in Table XXIV had a

TABLE XXIII

UNITS OF AUDIOVISUAL EQUIPMENT OWNED OR AVAILABLE ON LOAN TO SCHOOLS IN ENROLLMENT GROUP I

Item 4-1: Indicate the approximate _number_ of each type of _A.V. equipment_ your school owns [orborrows].

Type of A.V. Equipment	Enrollment Group I (1-50)								TOTAL**	
	School 1		School 2		School 3		School 4*			
	OWNS	BORROWS	OWNS	BORROWS	OWNS	BORROWS	OWNS	BORROWS	OWNS	BORROWS
16 mm projectors	1	0	1	0	1	0	-	-	3	-
8 mm loop projectors	0	0	0	0	0	0	-	-	0	0
8 mm reel projectors	0	0	0	0	0	0	-	-	0	0
Slide-filmstrip projectors										
Filmstrip projectors	0	0	1	0	0	0	-	-	1	0
2"x 2" slide projectors	0	0	0	0	0	0	-	-	0	0
Overhead projectors	1	0	0	0	1	0	-	-	2	0
Opaque projectors	0	0	1	0	0	0	-	-	1	0
Microprojectors	0	0	0	0	1	0	-	-	1	0
Television receivers	0	0	0	0	0	0	-	-	0	0
VTRs with cameras	0	0	0	0	0	0	-	-	0	0
Equipment carts	1	0	1	0	1	0	-	-	2	0
Projection screens	1	0	0	0	1	0	-	-	3	0
Microfilm readers	0	0	0	0	0	0	-	-	0	0
Tape recorders	0	0	0	0	0	0	-	-	0	0
Radios	0	0	0	0	0	0	-	-	0	0
Record players	0	0	0	0	1	0	-	-	1	0
Public address system	0	0	0	0	0	0	-	-	0	0
Other	0	0	0	0	0	0	-	-	0	0
TOTAL	4	0	4	0	6	0	-	-	14	0

-Indicate no figures were available   *Indicates schools in a college
**Total figures incomplete

total of one hundred sixty-four units of audiovisual equipment which
it could borrow, while school seventeen in Table XXVI and not in a
college, was reported to own a total of thirty-one units of audio-
visual equipment. This figure was the highest reported by any of the
fourteen schools not in a college.

Of the sixteen schools responding to item 4-1 in the survey-
questionnaire, fifteen reported owning or having access to at least
one sixteen millimeter motion picture projector. An overhead
projector was reported owned by, or available on loan to, fourteen
of the sixteen schools, and thirteen schools reported portable
projection screens. Nine of the sixteen schools reported owning or
having access to a combination thirty-five millimeter slide-filmstrip
projector, two inch by two inch slide (only) projector, an opaque
projector, portable projection carts and a tape-recorder. Ten of
the sixteen schools reported owning or having access to a record
player. Audiovisual eqipment units which were reported in less
than one-third of the sixteen schools included microprojectors,
television receivers, video(television) tape-recorders and microfilm
readers. The unit least often reported owned by, or available on
loan to, the schools was the radio.

Audiovisual Materials Inventory. Tables XXVII through XXX report
the total audiovisual materials which were owned by, or were avail-
able on loan to, each school in each of the four enrollment groups.
For the fourteen schools which reported to own some or all of their
audiovisual materials, it was found generally that the larger the
school enrollment, the greater the total audiovisual materials owned

TABLE XXIV

UNITS OF AUDIOVISUAL EQUIPMENT OWNED OR AVAILABLE ON LOAN TO SCHOOLS IN ENROLLMENT GROUP II

Item 4-1: Indicate the approximate number of each type of A.V. equipment your school owns [or borrows].

Type of Materials	School 5* OWNS	School 5* BORROWS	School 6* OWNS	School 6* BORROWS	School 7 OWNS	School 7 BORROWS	School 8 OWNS	School 8 BORROWS	School 9 OWNS	School 9 BORROWS	School 10 OWNS	School 10 BORROWS	School 11 OWNS	School 11 BORROWS	TOTAL OWNS	TOTAL BORROWS
16 mm projectors	0	5	0	5	1	0	1	0	1	0	1	0	1	0	5	10
8 mm loop projectors	1	1	0	5	0	0	0	0	0	0	0	0	0	0	1	6
8 mm reel projectors	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
Slide-filmstrip projector	1	4	0	3	0	0	1	0	1	0	0	0	0	0	3	7
Filmstrip projectors	0	2	0	4	0	0	0	0	0	0	0	0	1	0	1	6
2"x2" slide projectors	0	4	0	11	0	0	0	0	0	0	1	0	1	0	2	15
Overhead projectors	1	8	0	13	1	0	1	0	1	0	1	0	0	0	5	21
Opaque projectors	0	2	0	1	1	0	0	0	0	0	0	0	1	0	2	3
Microprojectors	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	1
Television receivers	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	14
VTRs with cameras	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4
Equipment carts	0	5	0	10	0	0	1	0	0	0	2	0	0	0	2	15
Projection screens	1	10	0	6	0	0	1	0	0	0	1	0	1	0	4	16
Microfilm readers	1	1	0	4	0	0	0	0	0	0	0	0	0	0	1	5
Tape recorders	1	11	0	45	0	0	1	0	1	0	2	0	0	0	5	56
Radios	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
Record players	1	5	0	10	0	0	0	0	0	0	1	0	0	0	2	15
Public address system	0	0	0	1	0	0	0	0	0	0	1	0	1	0	2	1
Other	1	0	0	26	0	0	0	0	0	0	0	0	0	0	1	26
TOTAL	8	59	0	164	4	0	5	0	4	0	11	0	6	0	38	223

*Indicates schools in a college

TABLE XXV

UNITS OF AUDIOVISUAL EQUIPMENT OWNED OR AVAILABLE
ON LOAN TO SCHOOLS IN ENROLLMENT GROUP III

Item 4-1: Indicate the approximate number of each type of A.V. equipment
your school owns [or borrows].

Type of A.V. Equipment	Enrollment Group III (101-200)				TOTAL	
	School 12		School 13			
	OWNS	BORROWS	OWNS	BORROWS	OWNS	BORROWS
16 mm projectors	1	0	1	0	2	0
8 mm loop projectors	0	0	0	0	0	0
8 mm reel projectors	0	0	0	0	0	0
Slide-filmstrip projectors	1	0	0	0	1	0
Filmstrip projectors	0	0	1	0	1	0
2" x 2" slide projectors	1	0	1	0	2	0
Overhead projectors	1	0	1	0	2	0
Opaque projectors	0	0	0	0	0	0
Microprojectors	0	0	0	0	0	0
Television receivers	0	0	0	0	0	0
VTRs with cameras	0	0	0	0	0	0
Equipment carts	6	0	2	0	8	0
Projection screens	1	0	1	0	2	0
Microfilm readers	0	0	0	0	0	0
Tape recorders	1	0	0	0	1	0
Radios	0	0	0	0	0	0
Record players	1	0	2	0	3	0
Public address system	0	0	0	0	0	0
Other	0	0	0	0	0	0
TOTAL	13	0	9	0	22	0

TABLE XXVI

UNITS OF AUDIOVISUAL EQUIPMENT OWNED OR AVAILABLE ON LOAN TO SCHOOLS IN ENROLLMENT GROUP IV

Item 4-1: Indicate the approximate number of each type of A.V. equipment your school owns [or borrows].

| Type of A.V. Equipment | Enrollment Group IV (over 200) | | | | | | | | TOTAL | |
| | School 14* | | School 15 | | School 16 | | School 17 | | | |
	OWNS	BORROWS	OWNS	BORROWS	OWNS	BORROWS	OWNS	BORROWS	OWNS	BORROWS
16 mm projectors	0	13	3	0	0	0	4	0	7	13
8 mm loop projectors	0	3	1	0	0	0	1	0	2	3
8 mm reel projectors	0	1	0	0	2	0	0	0	2	1
Slide-filmstrip projectors	0	0	2	0	1	0	1	0	4	0
Filmstrip projectors	0	0	0	0	0	0	0	0	0	0
2" x 2" slide projectors	0	20	2	0	0	0	4	0	6	20
Overhead projectors	0	6	3	0	2	0	2	0	7	6
Opaque projectors	0	4	2	0	1	0	1	0	4	4
Microprojectors	0	2	0	0	0	0	1	0	1	2
Television receivers	0	69	0	0	0	0	2	0	2	69
VTRs with cameras	0	16	0	0	0	0	1	0	1	16
Equipment carts	0	0	9	0	0	0	5	0	14	0
Projection screens	0	8	0	0	2	0	6	0	8	8
Microfilm readers	0	0	0	0	0	0	0	0	0	0
Tape recorders	0	8	2	0	0	0	1	0	3	8
Radios	0	0	0	0	0	0	0	0	0	0
Record players	0	2	1	0	1	0	1	0	3	2
Public address system	0	1	1	0	0	0	1	0	2	1
Other	0	11	0	0	0	0	0	0	0	11
TOTAL	0	164	26	0	9	0	31	0	66	164

*Indicates schools in a college

by those schools. Similarly, the larger the school enrollment among those fourteen schools, the greater the number of different types of audiovisual materials owned by those schools.

Except for school five in Table XXVIII, which reported to own a total of fifty audio tapes, none of the schools in a college was reported to own audiovisual materials. Although schools six and fourteen in a college had a greater total of audiovisual materials than any of the other fifteen schools, they did not have the greatest selection of the thirteen types of audiovisual materials cited in the survey-questionnaire. Instead, schools fifteen, sixteen and seventeen, which were not in a college, had the greatest variety of the thirteen types of audiovisual materials.

Of the sixteen schools responding to item 4-2 in the survey-questionnaire, fifteen reported owning or having access to torsos. Models were reported owned by, or available on loan to, twelve of the sixteen schools, and ten schools reported two inch by two inch slides. About half the schools reported owning or having access to preserved specimens, records, overhead transparencies and sixteen millimeter films. Audiovisual materials reported in less than one-third of the sixteen schools included eight millimeter loop and reel films, thirty-five millimeter filmstrips and video tapes. The audiovisual material least often reported owned or available on loan to the schools was the three and one-quarter inch by four inch slide. "Other" audiovisual materials included "Chase dolls", plaster and plastic models, and wall charts.

TABLE XXVII

AUDIOVISUAL MATERIALS OWNED OR AVAILABLE ON LOAN TO SCHOOLS IN ENROLLMENT GROUP I

Item 4-2: Indicate the approximate number of each type of A.V. materials your school owns [or borrows].

Type of A.V. Materials	Enrollment Group I (1-50)								TOTAL**	
	School 1		School 2		School 3		School 4*			
	OWNS	BORROWS	OWNS	BORROWS	OWNS	BORROWS	OWNS	BORROWS	OWNS	BORROWS
16 mm films	0	0	0	0	0	0	-	-	0	0
8 mm loop films	0	0	0	0	0	0	-	-	0	0
8 mm reel films	0	0	0	0	0	0	-	-	0	0
35 mm filmstrips	0	0	0	0	0	0	-	-	0	0
2" x 2" slides	0	0	0	0	36	0	-	-	36	0
3-1/4" x 4" slides	0	0	0	0	0	0	-	-	0	0
All types overhead transparencies	0	0	0	0	0	0	-	-	0	0
Video tapes	0	0	0	0	0	0	-	-	0	0
Audio tapes	0	0	0	0	0	0	-	-	0	0
Models	13	0	7	0	4	0	-	-	24	0
Records	0	0	0	0	0	0	-	-	0	0
Torsos	1	0	1	0	2	0	-	-	4	0
Preserved specimens	0	0	12	0	10	0	-	-	22	0
Other	0	0	0	0	0	0	-	-	0	0
TOTAL	14	0	20	0	52	0	-	-	86	0

*Indicates schools in a college
-Indicates figures were not available
**Total figures incomplete

TABLE XXVIII

AUDIOVISUAL MATERIALS OWNED OR AVAILABLE ON LOAN TO SCHOOLS IN ENROLLMENT GROUP II

Item 4-2: Indicate the approximate number of each type of A.V. materials your school owns [or borrows].

Type of A.V. Materials	School 5		School 6*		School 7		School 8		School 9		School 10		School 11		TOTAL**	
	OWNS	BORROWS	OWNS	BORROWS	OWNS	BORROWS	OWNS	BORROWS	OWNS	BORROWS	OWNS	BORROWS	OWNS	BORROWS	OWNS	BORROWS
16 mm films	-	-	0	180	1	0	2	0	0	0	0	0	10	0	13	180
8 mm loop films	-	-	0	80	8	0	0	0	0	0	0	0	0	0	8	80
8 mm reel films	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35 mm filmstrips	-	-	0	50	0	0	0	0	0	0	0	0	0	0	0	50
2" x 2" slides	-	-	0	10,000	0	0	0	0	0	0	1	0	36	0	36	10,000
3-1/4" x 4" slides	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0
All types overhead transparencies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Video tapes	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	12
Audio tapes	50	-	0	200	4	0	0	0	0	0	0	0	0	0	50	200
Models	-	-	0	-	0	0	0	0	6	0	0	0	2	0	12	0
Records	-	-	0	50	1	0	2	0	1	0	0	0	2	0	1	50
Torsos	-	-	0	3	0	0	0	0	1	0	1	0	1	0	7	3
Preserved specimens	-	-	0	-	0	0	10	0	20	0	0	0	0	0	31	0
Other	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	50	0	0	10,575	14	0	14	0	28	0	2	0	51	0	159	10,575

*Indicates schools in a college   **Total figures incomplete

-Indicates figures were not available

TABLE XXIX

AUDIOVISUAL MATERIALS OWNED OR AVAILABLE
ON LOAN TO SCHOOLS IN ENROLLMENT GROUP III

Item 4-2: Indicate the approximate number of each type of A.V. materials your school owns [or borrows].

| Type of A.V. Materials | Enrollment Group III (101-200) | | | | TOTAL** | |
| | School 12 | | School 13 | | | |
	OWNS	BORROWS	OWNS	BORROWS	OWNS	BORROWS
16 mm films	0	0	0	0	0	0
8 mm loop films	0	0	0	0	0	0
8 mm reel films	0	0	0	0	0	0
35 mm filmstrips	0	0	0	0	0	0
2" x 2" slides	560	0	1000	0	1560	0
3-1/4" x 4" slides	0	0	0	0	0	0
All types overhead transparencies	0	0	50	0	50	0
Video tapes	0	0	0	0	0	0
Audio tapes	12	0	24	0	36	0
Models	0	0	12	0	12	0
Records	2	0	4	0	6	0
Torsos	1	0	5	0	6	0
Preserved specimens	15	0	0	-	15	0
Other	9	0	0	0	9	0
TOTAL	599	0	1095	0	1694	0

-Indicates no figures were available
**Total figures incomplete

TABLE XXX

AUDIOVISUAL MATERIALS OWNED OR AVAILABLE ON LOAN TO SCHOOLS IN ENROLLMENT GROUP IV

Item 4-2: Indicate the approximate number of each type of A.V. materials your school owns [or borrows].

Type of A.V. Materials	Enrollment Group IV (over 200)								TOTAL**	
	School 14*		School 15		School 16		School 17			
	OWNS	BORROWS	OWNS	BORROWS	OWNS	BORROWS	OWNS	BORROWS	OWNS	BORROWS
16 mm films	0	41	4	0	32	0	4	0	40	41
8 mm loop films	0	0	23	0	0	0	7	0	35	0
8 mm reel films	0	0	0	0	1	0	2	0	3	0
35 mm filmstrips	0	0	35	0	25	0	0	0	60	0
2" x 2" slides	0	30,000	475	0	711	0	2,000	0	3,186	30,000
3-1/4" x 4" slides	0	0	0	0	138	0	0	0	138	0
All types overhead transparencies	0	0	-	0	30	0	-	0	30	0
Video tapes	0	400	0	0	0	0	0	0	0	400
Audio tapes	0	0	40	0	0	0	3	0	43	0
Models	0	-	18	0	62	0	21	0	101	0
Records	0	12	44	0	2	0	2	0	48	12
Torsos	0	-	8	-	10	0	1	0	19	0
Preserved specimens	0	0	20	0	0	0	0	0	20	0
Other	0	0	36	0	44	0	45	0	125	0
TOTAL	0	30,453	708	0	1,055	0	2,085	0	3,848	30,453

*Indicates schools in a college
-Indicates figures were not available
**Total figures incomplete

V. PERSONNEL

The ages of nursing instructors is reported in Table XXXI.
The median age of instructors in enrollment groups II, III and IV
was twenty-six to thirty years of age, slightly younger than
instructors in enrollment group I whose median age was between
thirty-one and thirty-five years. It was not possible to establish
whether or not the age of instructors had any direct relationship
to the status of a particular school's audiovisual program.

A study of Table XXXII reveals the professional preparation
of nursing instructors, including the total per enrollment group.
A comparison of the total number of nursing instructors with those
holding a Master's Degree of an R.N. showed no pattern. The proportion
of instructors with a Bachelor of Science Degree to the total number
or instructors generally increased as student enrollment increased.
The proportion of instructors with a University Diploma in Nursing
was almost constant. "Other" responses which were reported included
a Degree in Theology, a Home Economics Degree, Master of Arts Degrees,
a number of instructors working toward a Bachelor of Science Degree
in Nursing and one instructor working towards a Doctor of Nursing
Degree.

The teaching experience of nursing instructors, including
the total per enrollment group is reported in Table XXXIII. It
should be noted that the age intervals for Table XXXIII are not
equal. Although this is technically regrettable, it would not seem

TABLE XXXI

AGE OF INSTRUCTORS

Item 5-2: How many of the nursing instructors mentioned in question 5-1 above are:

Ages of Instructors	Enrollment Groups																			
	I (1-50)					II (51-100)								III (101-200)			IV (over 200)			
	SCHOOL				TOTAL	SCHOOL							TOTAL**	SCHOOL		TOTAL	SCHOOL				TOTAL
	1*	2	3	4		5*	6*	7	8	9	10	11		12	13		14*	15	16	17	
Number of full and part-time instructors	3	2	9	8	22	16	6	9	12	–	10	10	63**	14	17	31	46	30	22	29	127
25 years old and under	1	0	0	2	3	0	0	3	4	–	3	2	12	3	12	15	12	4	10	5	31
26-30 years old	2	0	1	3	6	2	2	3	8	–	3	3	21	6	2	8	22	15	7	12	56
31-35 years old	0	1	4	0	5	9	0	1	0	–	1	3	14	2	0	2	7	7	2	4	20
36-40 years old	0	0	4	0	4	2	1	1	0	–	0	0	4	2	1	3	4	2	3	4	13
Over 40 years old	0	1	0	3	4	3	3	1	0	–	3	2	12	1	2	3	1	2	0	4	7

*Indicates schools in a college
-Indicates figures were not available
**Total figures incomplete

TABLE XXXII

PROFESSIONAL PREPARATION OF INSTRUCTORS

Item 5-3: How many of the nursing instructors mentioned in question 5-2 above have:

Professional Prepara- tion of Instructors	Enrollment Groups																		
	I (1-50)					II (51-100)								III (101-200)			IV (over 200)			
	SCHOOL				TOTAL	SCHOOL							TOTAL	SCHOOL		TOTAL	SCHOOL				TOTAL
	1*	2	3	4		5*	6*	7	8	9	10	11		12	13		14*	15	16	17	
Number of full and part-time instructors	3	2	9	8	22	16	6	9	12	-	10	10	63	14	17	31	46	30	22	29	127
Masters Degree in Nursing	0	0	0	1	1	2	2	0	0	-	1	0	5	0	2	2	0	0	0	0	0
B.Sc. Degree in Nursing	3	1	1	3	8	12	2	5	8	-	4	3	34	12	11	23	28	17	18	26	89
University Diploma in Nursing	0	0	3	2	5	1	0	2	3	-	2	6	14	2	4	6	9	11	4	3	27
Other	0	0	0	1	1	1	2	0	0	-	1	0	4	0	0	0	2	0	0	0	2
R.N. only	0	1	5	1	7	0	0	2	1	-	2	1	6	0	0	0	7	2	0	0	9

*Indicates schools in a college
-Indicates figures were not available
**Total figures incomplete

TABLE XXXIII

TEACHING EXPERIENCE OF INSTRUCTORS

Item 5-4: How many of the nursing instructors mentioned in question 5-3 above have:

Teaching Experience of Instructors	I (1-50)					II (51-100)								III (101-200)			IV (over 200)				
	SCHOOL				TOTAL	SCHOOL							TOTAL**	SCHOOL		TOTAL	SCHOOL				TOTAL**
	1*	2	3	4		5*	6*	7	8	9	10	11		12	13		14*	15	16	17	
Number of full and part-time instructors	3	2	9	8	22	16	6	9	12	-	10	10	63	14	17	31	46	30	22	29	127
Less than 1 year teaching experience	0	0	0	0	0	0	1	2	0	-	0	1	4	0	4	4	-	0	1	0	1
1-3 years	2	1	0	3	6	5	1	3	10	-	3	3	25	9	8	17	-	20	14	16	50
4-6 years	1	1	4	4	10	6	0	2	2	-	3	0	13	1	3	4	-	6	4	9	19
7-10 years	0	0	4	0	4	4	1	0	-	-	2	4	11	2	1	3	-	3	3	3	9
over 10 years	0	0	1	1	2	2	3	2	-	-	2	2	11	2	1	3	-	1	0	1	2

Enrollment Groups

*Indicates schools in a college   **Total figures incomplete   --Indicates figures were not available

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to have serious analytical consequences. The majority of nursing instructors had between one and six years of teaching experience. As school enrollment increased, the proportion of the number of instructors with one to three years teaching experience to the total number of instructors also increased. However, no such general statement could be made about figures reported for instructors with four to six years of teaching experience. All schools reported relatively few instructors with less than one year of teaching experience or with more than ten years teaching experience. Generally, as enrollment increased the proportion of the number of instructors with seven to ten years teaching experience to the total number of instructors, decreased.

Table XXXIV reports the formal audiovisual preparation of nursing instructors, including the total per enrollment group. Instructors which had one, two or three or more formal audiovisual courses as part of their professional training were reported in an extreme minority of the schools. Five instructors had one formal audiovisual course and one instructor had two or three courses. Thus six of a possible two hundred forty-three instructors had formal audiovisual coursework.

As school enrollment increased the proportion of the number of instructors with one or more Nursing Education courses which offered some audiovisual methodology and principles to the total number of instructors also increased. However, as school enrollment increased, the proportion of the number of instructors with no formal audiovisual courses in their professional preparation to the total number of

TABLE XXXIV

FORMAL AUDIOVISUAL PREPARATION OF INSTRUCTORS

Item 5-5: How many nursing instructors (including the Director of Nursing) have:

Audiovisual Preparation of Instructors	I (1-50)					II (51-100)								III (101-200)			IV (over 200)				
	SCHOOL				TOTAL	SCHOOL							TOTAL**	SCHOOL		TOTAL	SCHOOL				TOTAL**
	1*	2	3	4		5*	6*	7	8	9	10	11		12	13		14*	15	16	17	
Number of full and part-time instructors	3	2	9	8	22	16	6	12		-	10	10	63	14	17	31	46	30	22	29	127
1 A.V. course	0	0	0	0	0	2	2	0	0	-	0	0	4	0	0	0	-	0	0	1	1
2-3 A.V. courses	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	-	0	0	1	1
More than 3 A.V. courses	0	0	0	0	0	0	0	0	0	---	0	0	0	0	0	0	-	0	0	0	0
One or more Nursing Education courses offering some A.V. methodology/principles	1	1	0	3	5	12	0	5	0	-	0	0	17	14	0	14	-	0	22	15	37
No formal A.V. courses	2	1	9	5	17	2	4	4	12	-	10	10	42	0	17	17	-	30	0	12	42

*Indicates schools in a college   **Total figures incomplete   -Indicates figures were not available

instructors, decreased.

School personnel who were available to assist instructors with the operation, selection, preparation and utilization of audio-visual equipment and materials are reported in Table XXXV. One school reported having an audiovisual committee available to assist instructors and three schools reported one faculty member available to assist in audiovisual matters. Three schools had librarians who had some formal audiovisual training, while another four reported having librarians' who had no formal audiovisual training whatsoever.

Although only one school reported having no one available to assist instructors with audiovisual matters, ten schools reported personnel other than the audiovisual committee, librarian or faculty members available to assist the instructors with audiovisual matters. "Other" responses included appointed members of a college or university faculty, secretaries, hospital personnel, medical photographers and clinical coordinators.

No table is shown for data corresponding to item 5-7 of the survey questionnaire for the number of hours of released time from regular duties for the person or persons designated to help instructors with audiovisual matters. However, of the five schools which did report giving released time, the general response indicated "as much time as is needed".

Only one of the seventeen schools reported that no secretarial or clerical assistance was available to nursing instructors, as indicated in Table XXXVI of the study. However, twelve of the sixteen schools which reported making secretarial or clerical assistance available

TABLE XXXV

SCHOOL PERSONNEL WHO ASSIST INSTRUCTORS IN AUDIOVISUAL MATTERS

Item 5-6: Within the school itself, nursing instructors may obtain assistance in the operation, selection, preparation and utilization of A.V. equipment and materials from: (CIRCLE ALL THAT APPLY)

| Assist Instructors In A.V. Matters | Enrollment Groups | | | | TOTAL |
	I (1-50) 4 schools (4 responding)	II (51-100) 7 schools (7 responding)	III (101-200) 2 schools (2 responding)	IV (over 200) 4 schools (4 responding)	17 schools (17 responding)
A.V. committee	0	0	0	1	1
One faculty member	1	0	0	2	3
Librarian who has A.V. training	1	1	0	1	3
Librarian who has no A.V. training	0	2	1	1	4
No one	0	1	0	0	1
Other	2	4	1	3	10

TABLE XXXVI

TYPE OF SECRETARIAL OR CLERICAL ASSISTANCE AVAILABLE TO INSTRUCTORS

Item 5-8: Secretarial or clerical assistance is available to nursing instructors for: (CIRCLE ALL THAT APPLY)

Secretarial and Clerical Staff Assist Instructors By:	Enrollment Groups				TOTAL
	I (1-50) 4 schools (4 responding)	II (51-100) 7 schools (6 responding)	III (101-200) 2 schools (2 responding)	IV (over 200) 4 schools (4 responding)	17 schools (16 responding)
Preparing machine-made overhead transparencies	0	2	0	3	5
Duplicating	3	5	2	4	14
Scheduling A.V. Media utilization	1	3	2	3	9
Ordering/returning A.V. media from outside the school	3	5	2	3	13
Not available	0	1	0	0	1
Other	0	1	0	0	1

to nursing instructors indicated it was in the form of duplicating "handouts". Activities directly related to audiovisual activities within the schools included preparing machine made transparencies in five schools, scheduling audiovisual equipment and materials for classroom use in nine schools, and ordering and returning special audiovisual equipment and materials from outside the schools in thirteen of the sixteen schools. The one "other" response indicated that secretarial and clerical staff operated projection equipment for nursing instructors.

Table XXXVII indicates that the use of student audiovisual assistants in audiovisual programs in Alberta's seventeen Diploma and Junior College Schools of Nursing was not widespread as twelve schools reported that student audiovisual assistants were not used. Of those five schools which reported using student audiovisual assistants, two had students pick up audiovisual equipment and material from the audiovisual storage room, center or library and return them after use by the instructors. Two schools reported student audiovisual assistants who operated audiovisual equipment for instructors during class periods. One school reported student audiovisual assistants who helped instructors prepare some audio-visual materials, assisted in minor equipment maintenance and who helped with clerical work. Three of the five schools reported that student audiovisual assistants were trained in audiovisual equip-ment operation before they were allowed to operate the equipment. Four of the five schools which had student audiovisual assistants were schools with an enrollment of one hundred students or less.

MANNER OF USING STUDENT AUDIOVISUAL ASSISTANTS

Item 5-9: Student A.V. assistants: (CIRCLE ALL THAT APPLY)

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Student A.V. Assistants	Enrollment Groups				TOTAL
	I (1-50) 4 schools (4 responding)	II (51-100) 7 schools (7 responding)	III (101-200) 2 schools (2 responding)	IV (over 200) 4 schools (4 responding)	17 schools (17 responding)
Are not used	2	5	2	3	12
Pick-up/return A.V. media	1	1	0	0	2
Help prepare A.V. materials	1	0	0	0	1
Help in equipment maintenance	1	0	0	0	1
Do clerical work	1	0	0	0	1
Operate A.V. media	0	1	0	1	2
Are trained to operate media	1	1	0	1	3
Other	0	0	0	0	0

VI. LOCAL PRODUCTION

The status of local production equipment and materials is shown in Table XXXVIII. One unit of equipment, an office-type device, was reported in twelve of the seventeen Diploma and Junior College Schools of Nursing studied. That was a "Xerox" or similar copy machine. A thermal process copier was reported by five schools. A thirty-five millimeter still camera and a spirit duplicator were reported in approximately one-third of the seventeen schools. Three schools reported having an eight or sixteen millimeter motion picture camera, a drymount press with mounting materials and mechanical lettering equipment. Four schools made dry-transfer (pressure sensitive) lettering available to their instructors. Schools in enrollment groups II and IV had proportionately more local production equipment and materials than schools in the other two groups. However, three of the four schools in a college were among the eleven schools in enrollment groups II and IV.

The types of audiovisual materials produced during the 1969 calendar year in Alberta's seventeen Diploma and Junior College Schools of Nursing are reported in Table XXXIX. The materials produced in the greatest number of schools were overhead transparencies. Photographic prints and two inch by two inch slides were produced in eight schools, while three and one-quarter inch by four inch slides and thirty-five millimeter filmstrips were produced in one school. Mounted pictures for instructional use were reported produced in five schools and a

TABLE XXXVIII

LOCAL PRODUCTION FACILITIES

Item 6-1: Facilities, equipment and materials available to instructors to produce their own A.V. materials for instruction include: (CIRCLE ALL THAT APPLY)

Local Production Facilities Include:	Enrollment Groups				TOTAL
	I (1-50) 4 schools (4 responding)	II (51-100) 7 schools (7 responding)	III (101-200) 2 schools (2 responding)	IV (over 200) 4 schools (4 responding)	17 schools (17 responding)
8mm/16mm motion picture camera	0	2	0	1	3
35mm still camera	0	2	0	3	5
Drymount press and mounting materials	0	1	0	2	3
Mechanical lettering equipment	0	1	0	2	3
Dry-transfer lettering	0	2	1	1	4
Spirit duplicator	1	2	1	2	6
Thermal process copier	2	2	0	2	6
Xerox or similar copy machine	1	5	2	4	12
Other	1	0	2	0	3

TABLE XXXIX

NUMBER OF SCHOOLS PRODUCING AUDIOVISUAL MATERIALS DURING 1969 CALENDAR YEAR

Item 6-2: A.V. materials that were produced in your school during the calendar year 1969 include: (CIRCLE ALL THAT APPLY)

A.V. Materials Produced Include:	Enrollment Groups				TOTAL
	I (1-50) 4 schools (4 responding)	II (51-100) 7 schools (7 responding)	III (101-200) 2 schools (2 responding)	IV (over 200) 4 schools (4 responding)	17 schools (17 responding)
Photographs	0	2	2	4	8
2"x2" slides	0	3	1	4	8
3-1/4" x 4" slides	0	0	1	0	1
Mounted pictures	0	1	1	3	5
8mm/16mm films	0	1	0	1	2
8mm loop films	0	0	0	0	0
35mm filmstrips	0	0	0	1	1
Video tapes	0	1	0	2	3
Audio tapes	0	3	0	2	5
Overhead transparencies	2	3	2	4	11
Other	0	0	1	0	1

similar number of schools reported producing audio tapes. Video
tapes were produced in three schools, eight or sixteen millimeter
motion picture films in two schools and none of the seventeen schools
were reported to have produced eight millimeter loop cartridge films.
Schools in enrollment groups II and IV produced proportionately more
audiovisual materials than schools in the other two groups. However,
three of the four schools in a college were among the eleven schools
in enrollment groups II and IV. Schools in enrollment group I were
reported to have produced overhead transparencies, and nothing else.

The organizational controls for distributing local production
supplies in fourteen of the seventeen schools are reported in Table
XL. Three schools reported that supplies for local production of
audiovisual materials for instructors were not used. Seven schools
reported local production supplies drawn from a central supply area
without limitations as to the amount used. Another three schools
however, reported supplies were drawn from a central supply area, but
with formal regulations on the amount used. None of the fourteen
schools reported that local production supplies were limited by
subject area or by per-teacher quotas. The one "other" response
indicated that local production supplies were available on the
request of the instructors.

VII. IN-SERVICE

A study of Table XLI reveals that seven of the seventeen
Diploma and Junior College Schools of Nursing in Alberta did not have

TABLE XL

NUMBER OF SCHOOLS REPORTING AVAILABILITY OF LOCAL PRODUCTION SUPPLIES

Item 6-3: Supplies for local production of A.V. materials for instructors are: (CIRCLE ALL THAT APPLY)

Local Production Supplies are:	Enrollment Groups				TOTAL
	I (1-50) 4 schools (4 responding)	II (51-100) 7 schools (5 responding)	III (101-200) 2 schools (1 responding)	IV (over 200) 4 schools (4 responding)	17 schools (14 responding)
Not used	0	2	1	0	3
Limited by subject area quotas	0	0	0	0	0
Drawn from a central area on a limited basis	0	0	1	2	3
Limited by a per-teacher quota	0	0	0	0	0
Drawn from a central area as required	3	3	0	1	7
Other	0	0	0	1	1

TABLE XLI

NUMBER OF SCHOOLS REPORTING IN-SERVICE AUDIOVISUAL PROGRAMS

Item 7-1: An in-service A.V. training program for instructors: (CIRCLE ALL THAT APPLY)

In-service A.V. Program	Enrollment Groups				TOTAL
	I (1-50) 4 schools (2 responding)	II (51-100) 7 schools (2 responding)	III (101-200) 2 schools (2 responding)	IV (over 200) 4 schools (4 responding)	17 schools (10 responding)
Does not exist	2	5	0	0	7
Exists on a limited basis	0	1	2	3	6
Is held 3 or 4 times per year	0	0	0	1	1
Is devoted to equipment operation	1	2	2	2	7
Includes workshops conducted by A.V. specialists	0	0	0	2	2
Provides A.V. utilization and selection techniques	0	0	0	1	1
Is not needed	0	0	0	0	0
Other	0	0	0	0	0

audiovisual in-service programs for their instructors. All seven were among eleven schools in enrollment groups I and II. Among the ten schools which did have audiovisual in-service programs, six reported that their programs existed on a limited basis e.g. once or twice per school year. Only one school indicated that an audiovisual in-service program was conducted three or more times per school year. That school was in enrollment group IV.

Seven of the ten schools reported that when held, audiovisual in-service programs were almost entirely devoted to teaching instructors proper operation of equipment. Two schools indicated that in-service programs included workshops, lectures and demonstrations by guest speakers who specialized in audiovisual methods and techniques. None of the ten schools indicated that audiovisual in-service programs were not needed because all instructors knew how to use and prepare all types of audiovisual equipment and materials. One school indicated having audiovisual in-service programs which included not only proper techniques for operation of audiovisual equipment, but also included selection and utilization techniques.

As seen in Table XLII, audiovisual in-service demonstrations were most commonly presented by salesmen in twelve of the seventeen schools. Department of Education personnel, college or university personnel, and people within the schools themselves, including an audiovisual coordinator, the directors of the schools, nursing instructors and school librarians all were reported to give audiovisual demonstrations in a small number of schools. "Other" responses from three schools included audiovisual technicians and

TABLE XLII

PERSONNEL PRESENTING IN-SERVICE AUDIOVISUAL DEMONSTRATIONS

Item 7-2: The following people present in-service demonstrations to the school faculty on occasion:
(CIRCLE ALL THAT APPLY)

Present A.V. In-service Demonstrations	Enrollment Groups				TOTAL
	I (1-50) 4 schools (4 responding)	II (51-100) 7 schools (7 responding)	III (101-200) 2 schools (2 responding)	IV (over 200) 4 schools (4 responding)	17 schools (17 responding)
Salesmen	2	5	2	3	12
A.V. coordinator	1	0	0	0	1
Director of School	1	0	0	0	1
Nursing instructors	1	1	0	2	4
Librarian	0	0	2	1	3
Department of Education Personnel	0	1	0	1	2
University or College Personnel	0	0	0	3	3
Other	0	1	1	1	3

audiovisual department personnel in the hospitals used for nursing service.

Those people with whom audiovisual salesmen consulted most frequently when selling their products were reported in Table XLIII. They included the director of the school in twelve of the seventeen schools and the instructors and librarians in five schools. One school indicated that audiovisual salesmen consulted with the Administrative Governing Board of the school or the audiovisual coordinator when trying to sell their products. "Other" responses reported by three schools revealed that audiovisual salesmen did not consult with personnel at any level.

The amount of audiovisual media involvement reported by directors of the schools at conventions during the calendar year 1969 is revealed in Table XLIV. Displays of audiovisual equipment and materials were reported by six schools, audiovisual materials by five schools, and five schools reported demonstration lessons on the use of audiovisual equipment and materials at conventions. Two schools reported the presence of guest speakers, while four schools reported that there was no sign or mention of audiovisual media at any conventions attended by school representatives.

Table XLV reports the sources available outside the seventeen Diploma and Junior College Schools of Nursing offering audiovisual assistance or coursework to nursing instructors. Six of the seventeen schools reported that a college or university was available locally for instructors to obtain audiovisual assistance or coursework, and six reported that salesmen were often available to render assistance

TABLE XLIII

PERSONNEL WITH WHOM AUDIOVISUAL SALESMEN CONSULT

Item 7-3: Salesmen representing companies selling A.V. equipment, materials or services most often consult with the: (CIRCLE ALL THAT APPLY)

A.V. Salesmen Consult With:	Enrollment Groups				TOTAL
	I (1-50) 4 schools (4 responding)	II (51-100) 7 schools (7 responding)	III (101-200) 2 schools (2 responding)	IV (over 200) 4 schools (4 responding)	17 schools (17 responding)
Director of School	2	4	2	4	12
A.V. coordinator	1	0	0	0	1
Instructors	1	2	1	1	5
Librarian	1	1	1	2	5
Governing Board	0	0	0	1	1
Other	0	2	1	0	3

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TABLE XLIV

DIRECTORS OF NURSING REPORTING AUDIOVISUAL ACTIVITIES AT CONVENTIONS

Item 7-4: Indicate which of the following were part of any of the conventions you attended during the Calendar year 1969.

A.V. activities at conventions	Enrollment Groups				TOTAL
	I (1-50) (4 schools responding)	II (51-100) (7 schools responding)	III (101-200) (2 schools responding)	IV (over 200) (4 schools responding)	17 schools (17 responding)
A.V. equipment display	3	1	2	0	6
A.V. materials display	1	1	1	2	5
A.V. demonstrations	0	2	1	2	5
A.V. guest speakers	1	0	0	1	2
Other	0	0	0	0	0
No sign or mention of the A.V. field	0	3	0	1	4

TABLE XLV

SCHOOLS REPORTING SOURCES OUTSIDE THE SCHOOL OFFERING AUDIOVISUAL ASSISTANCE OR COURSEWORK

Item 7-5: Outside the school locally, nursing instructors may obtain assistance or take coursework in the operation, selection, preparation and utilization of A.V. equipment and materials from: (CIRCLE ALL THAT APPLY)

Offer A.V. Assistance or Coursework	Enrollment Groups				TOTAL
	I (1-50) 4 schools (2 responding)	II (51-100) 7 schools (7 responding)	III (101-200) 2 schools (2 responding)	IV (over 200) 4 schools (4 responding)	17 schools (15 responding)
University or College	0	2	1	3	6
Volunteer public or separate school A.V. personnel	0	0	0	2	2
A.V. salesmen	2	2	0	2	6
University or College A.V. specialist	0	0	0	2	2
Other	0	3	1	0	4

in the operation, selection, preparation and utilization of audiovisual equipment and materials. Two schools reported that one or more volunteer separate or public school personnel trained in audiovisual techniques and methodology were available to assist nursing instructors and a similar number reported that college or university level specialists were available from outside the schools to assist instructors in the operation, selection, preparation and utilization of audiovisual equipment and materials. "Other" responses from four schools included sources such as the local library and "none to date".

VIII. BARRIERS TO THE AUDIOVISUAL PROGRAM

A lack of money was reported as the major barrier to a successful audiovisual program in thirteen of the seventeen Alberta Diploma and Junior College Schools of Nursing. Other major barriers reported by about half the schools, as seen in Table XLVI were a lack of time for instructors to explore audiovisual instructional techniques outside their regular teaching duties, few good audiovisual materials available in some subject areas, and instructors who were generally not trained in the operation and utilization of audiovisual equipment and materials. Inadequate classroom facilities for the use of audiovisual equipment and materials was reported as a barrier by six schools. The fact that audiovisual equipment and materials within the schools could not always be available when needed was reported by five schools, and four schools reported that audiovisual equipment and materials were not available

TABLE XLVI

BARRIERS TO THE AUDIOVISUAL PROGRAM

Item 8-1: Below is a list of difficulties or barriers which educators have experienced in trying to execute a successful A.V. program: (CIRCLE ALL THE DIFFICULTIES OR BARRIERS THAT YOU FEEL ARE EVIDENT IN YOUR SCHOOL)

Barriers to A.V. Program	Enrollment Groups				TOTAL
	I (1-50) 4 schools (4 responding)	II (51-100) 7 schools (7 responding)	III (101-200) 2 schools (2 responding)	IV (over 200) 4 schools (4 responding)	17 schools (17 responding)
Lack of money	3	5	2	3	13
Few good A.V. materials available	1	3	2	2	8
Instructors not trained in A.V. methodology	2	5	0	1	8
Instructors lack time to explore A.V. field	2	2	1	3	8
Inadequate classroom A.V. facilities	1	4	0	1	6
School A.V. media not available when needed	0	3	1	1	5

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TABLE XLVI (continued)

BARRIERS TO THE AUDIOVISUAL PROGRAM

Barriers to A.V. Program	Enrollment Groups				TOTAL
	I (1-50) 4 schools (4 responding)	II (51-100) 7 schools (7 responding)	III (101-200) 2 schools (2 responding)	IV (over 200) 4 schools (4 responding)	17 schools (17 responding)
Lack of production facilities	0	2	1	2	5
Administration doubts value of A.V. media	1	3	0	0	4
Inadequate equipment servicing	2	1	0	1	4
A.V. media too expensive for results	2	1	0	1	4
Inadequate storage space	0	3	0	1	4
Lack of A.V. equipment and materials	1	2	0	1	4
No planned evaluation	0	3	1	0	4
School A.V. media not available where needed	0	1	0	3	4

TABLE XLVI (continued)

BARRIERS TO THE AUDIOVISUAL PROGRAM

Barriers to A.V. Program	Enrollment Groups				TOTAL
	I (1-50) 4 schools (4 responding)	II (51-100) 7 schools (7 responding)	III (101-200) 2 schools (2 responding)	IV (over 200) 4 schools (4 responding)	17 schools (17 responding)
Student body and building too small	3	1	0	0	4
Teacher indifference	1	2	0	0	3
No system to discard "weak" A.V. media	0	2	1	0	3
Poor building design	1	1	0	1	3
A.V. equipment hard to operate	0	2	0	0	2
Other	0	2	0	0	2
Students see A.V. as entertainment	1	0	0	0	1
Too much "red-tape"	0	1	0	0	1
Lack of storage space	0	1	0	0	1
A.V. equipment obsolete	0	0	0	0	0

where they were needed. Four schools indicated that the administration

of the school was not convinced of the value of audiovisual media,

that inadequate equipment servicing was a problem, that audiovisual

equipment and materials were too expensive for the results achieved,

that there was inadequate audiovisual storage space, that there was

a general lack of audiovisual equipment and materials located in the

schools, that there was no regular or planned evaluation of the

audiovisual program, and that the student body and school buildings

were too small to justify the use of some audiovisual equipment.

Three schools reported teacher indifference, poor building design for

easy distribution of audiovisual equipment and materials, and the

absence of an inventory program to discard inferior audiovisual

equipment and materials as barriers to a more effective audiovisual

program.

As reported by directors of two schools, instructors found

much of the audiovisual equipment hard to operate, and one school

each reported too much "red-tape" involved in ordering and scheduling

audiovisual equipment and materials, a lack of storage space for

audiovisual equipment and materials, and that students generally

considered audiovisual media as entertainment. There was one barrier

which all schools unanimously rejected as a barrier to their audio-

visual programs. That was the suggestion that their audiovisual

equipment was obsolete. "Other" responses that were reported as

barriers to the audiovisual program included teacher ignorance of

the availability of audiovisual materials for nursing education and

that the total school enrollment was not large enough to justify

a full-time audiovisual specialist.

IX. EVALUATION (FACILITATORS)

Table XLVII reports some of the things cited in item 9-1
in the survey-questionnaire which nursing instructors need in order
to improve the utilization of audiovisual equipment and materials
in their schools as reported by the directors of the schools. Thir-
teen of the seventeen schools indicated that instructors needed
training in the basic and creative utilization of audiovisual equip-
ment and materials. Twelve schools indicated that the instructors
needed time to prepare audiovisual materials or to preview them.
Eleven of the seventeen schools each reported that instructors needed
training in the operation of audiovisual equipment, to make themselves
aware of what was available in the audiovisual field, what services
are offered by the many companies selling audiovisual equipment and
materials, and frequent in-service workshops to become familiar
with new developments in the audiovisual field. Seven schools
indicated that nursing instructors could use formal preparation and
education in audiovisual methods and theory, a person specially
trained in audiovisual communications (either full or part-time)
with whom they can consult or receive help in any area of audiovisual
instruction, and that they need to take a more active part in the
selection of audiovisual equipment and materials available to nursing
educators. Ten schools also reported that instructors needed an
up-to-date study guide or catalog of recommended audiovisual materials
for nursing education.

TABLE XLVII

AUDIOVISUAL NEEDS OF NURSING INSTRUCTORS

Item 9-1: In order to improve the utilization of A.V. equipment and materials in this school, instructors need: (CIRCLE ALL THAT APPLY)

Nursing Instructors Need	Enrollment Groups				TOTAL
	I (1-50) 4 schools (4 responding)	II (51-100) 7 schools (7 responding)	III (101-200) 2 schools (2 responding)	IV (over 200) 4 schools (4 responding)	17 schools (17 responding)
Basic and creative A.V. media utiliz- ation techniques	3	4	2	4	13
A.V. preparation time	3	5	1	3	12
Equipment operation training	2	5	1	3	11
To know what A.V. media and services are available to nursing educators	2	6	1	2	11
Frequent A.V. in- service programs	3	7	1	0	11

TABLE XLVII (continued)

AUDIOVISUAL NEEDS OF NURSING INSTRUCTORS

Nursing Instructors Need	Enrollment Groups				TOTAL
	I (1-50) 4 schools (4 responding)	II (51-100) 7 schools (7 responding)	III (101-200) 2 schools (2 responding)	IV (over 200) 4 schools (4 responding)	17 schools (17 responding)
An up-to-date A.V. catalog	2	4	1	3	10
A school A.V. specialist	2	4	1	0	7
To take part in A.V. media selection	2	2	1	2	7
Other	0	0	0	0	0

An indication from the directors regarding the types of
information needed by Diploma and Junior College Nursing School admin-
istrators (including the director) to improve or expand their present
audiovisual programs is reported in Table XLVIII. The most frequent
need indicated by twelve directors was that administrators need to be
regularly informed of the advantages and scope of audiovisual media
application and utilization. Eight directors reported that administra-
tors need professional consultation in areas of audiovisual budgeting
and priority spending for audiovisual equipment and materials, to be
kept informed by manufacturers and suppliers regarding audiovisual
equipment and materials available to nursing educators, and that they
would set more money aside for an extended audiovisual program if the
need were warranted.

Five directors indicated that administrators need to be con-
vinced of the necessity, value and instructional advantages of
using audiovisual media in nursing education. Similarly, five
reported that administrators need some indication that instructors
want and need more audiovisual materials for purposes of instruction.
Two directors indicated that school administrators would expand the
audiovisual program if they could observe a successful audiovisual
program in action.

The information recorded in Table XLIX describes the possible
duties of an audiovisual specialist if one were available in each of
the seventeen Diploma and Junior College Schools of Nursing on a full
or part-time basis. The major responsibility of an audiovisual
specialist reported by fourteen directors would be to set up regular

TABLE XLVIII

NEEDS OF ADMINISTRATORS RELATING TO THE AUDIOVISUAL PROGRAM

Item 9-2: Administrators of the school, including the Director of the School: (CIRCLE ALL THAT APPLY)

Administrators of the Schools Need:	Enrollment Groups				TOTAL
	I (1-50) 4 schools (4 responding)	II (51-100) 7 schools (7 responding)	III (101-200) 2 schools (2 responding)	IV (over 200) 4 schools (4 responding)	17 schools (17 responding)
Professional advice on how to improve A.V. facilities	2	6	1	3	12
To be regularly informed of the advantages of using A.V. media in nursing	3	4	1	3	11
A.V. budget and priority spending consultation	3	3	0	2	8
Only to be shown the need for an expanded A.V. program before they would set more money aside for it	2	2	2	2	8

TABLE XLVIII (continued)

NEEDS OF ADMINISTRATORS RELATING TO THE AUDIOVISUAL PROGRAM

Administrators of the Schools Need:	Enrollment Groups				TOTAL
	I (1-50) 4 schools (4 responding)	II (51-100) 7 schools (7 responding)	III (101-200) 2 schools (2 responding)	IV (over 200) 4 schools (4 responding)	17 schools (17 responding)
More information from manufacturers on A.V. media available for nursing education	2	2	1	3	8
To be convinced of the value of A.V. media	1	4	0	0	5
More indication from instructors that they need more A.V. media for instruction	1	3	1	0	5
To see a successful A.V. program in action	0	1	1	0	2

TABLE XLIX

POSSIBLE DUTIES OF AN AUDIOVISUAL SPECIALIST

Item 9-3: If this school had one person specially trained in A.V. on a full or part-time basis, this person could assume the following responsibilities: (CIRCLE ALL THAT APPLY)

Possible Duties of An A.V. Specialist	Enrollment Groups				TOTAL
	I (1-50) 4 schools (4 responding)	II (51-100) 7 schools (7 responding)	III (101-200) 2 schools (2 responding)	IV (over 200) 4 schools (4 responding)	17 schools (17 responding)
Set-up regular A.V. in-service workshops	3	6	2	3	14
Assist instructors in selection of A.V. media	2	6	2	3	13
Keep administrators informed of A.V. needs of the school	3	5	2	3	13
Evaluate A.V. program	3	6	2	2	13
Assist or prepare A.V. materials for nursing instructors	2	6	1	3	12
Systematically "weed" the A.V. collection	2	5	1	3	11

TABLE XLIX (continued)

POSSIBLE DUTIES OF AN AUDIOVISUAL SPECIALIST

Possible Duties of an A.V. Specialist	Enrollment Groups				TOTAL
	I (1-50) 4 schools (4 responding)	II (51-100) 7 schools (7 responding)	III (101-200) 2 schools (2 responding)	IV (over 200) 4 schools (4 responding)	17 schools (17 responding)
Coordinate procurement of A.V. media and services	2	4	2	3	11
Keep inventories and maintenance schedules	2	4	2	2	10
Minor equipment repair	2	4	2	2	10
Develop policies for selection and use of A.V. media	1	5	1	2	9
Teach minor equipment repair techniques	1	3	1	2	7
Train A.V. assistants	1	2	1	1	5

in-service workshops to teach instructors the operation of audiovisual
equipment as well as basic and creative utilization of audiovisual
media. Thirteen directors indicated that the audiovisual specialist
could constantly evaluate the audiovisual program, could assist
instructors in proper selection of appropriate audiovisual equipment
and materials for their teaching requirements, and could keep chief
school administrators (including the director of the school) informed
of the needs and services related to a school's audiovisual program.
Eleven schools indicated that the audiovisual specialist could
function to keep audiovisual selection functional by systematic
"weeding" and could also coordinate procurement by individual subject
areas and instructors of audiovisual equipment and materials, includ-
ing rented audiovisual equipment and materials.

Ten of the directors responded affirmatively that if an
audiovisual specialist was on staff he or she could keep an up-to-date
audiovisual inventory and equipment maintenance schedule and could also
make minor audiovisual equipment repairs. About half the schools
indicated that a school audiovisual specialist could assume the
responsibility to exercise leadership in the development of policies
for selection and use of audiovisual media. Seven schools indicated
that an audiovisual specialist could be utilized to teach instructors
minor audiovisual equipment repair techniques, and five schools
indicated that a school audiovisual specialist could train and
supervise student audiovisual assistants.

CHAPTER V

A COMPARISON OF THE FINDINGS WITH THE QUANTITATIVE STANDARDS

FOR AUDIOVISUAL PERSONNEL, EQUIPMENT AND MATERIALS IN

ELEMENTARY, SECONDARY, AND HIGHER EDUCATION

Although the Diploma and Junior College Schools of Nursing
in this study may be more properly considered at the vocational
education level because of their patient care oriented programs, they
must also be considered to be schools of higher education. In the
absence of recognized quantitative standards for evaluating audio-
visual programs in higher-education institutions the size of Diploma
and Junior College Schools of Nursing in the Province of Alberta,
the Quantitative Standards For Audiovisual Personnel, Equipment and
Materials In Elementary, Secondary, and Higher Education (See
Appendix E, page 161) are used as one criterion base with which to
compare the findings of this study. Because these standards were
established for comprehensive higher education institutions offering
a variety of educational programs, it would be necessary to modify
them in order to make comparisons which would be meaningful to
educators in institutions the size of Alberta's Diploma and Junior
College Schools of Nursing. Therefore, the investigator does not
imply that the Diploma and Junior College Schools of Nursing should
meet the requirements established by the Standards, but uses them to
direct the attention of nursing educators in Alberta to the types of
audiovisual personnel, materials, equipment and budgets which are

needed to support their audiovisual programs. While these Standards were used as a reference in the planning stages of this study because they represent a stage in a study to "Formulate Quantitative Guidelines for the Audiovisual Communications Field," (Fareis and Sherman, 1966, p. 1) it was not possible to collect data suitable for direct comparison with them in many cases. For this reason the comparison does not consider all aspects of either the study or the Standards. The data which are compared with the "basic" Quantitative Standards include personnel, audiovisual materials budget, audiovisual equipment budget, and audiovisual equipment.

I. PERSONNEL

The "Basic" Quantitative Standards call for one full-time audiovisual director in each comprehensive institution with supporting and secretarial staff as needed as the audiovisual program develops. In institutions the size of Diploma and Junior College Schools of Nursing in Alberta, it would seem reasonable for each school to at least have an audiovisual coordinator in charge of the audiovisual program. This person's qualifications, formal preparation and released time for carrying out audiovisual coordinating activities could be similar to those specified in the Quantitative Standards.

Generally, no one person by position or by the amount of formal audiovisual preparation was designated to assume the responsibility of coordinating or directing audiovisual activities. However thirteen schools did indicate that someone, usually the director of the school, assumed responsibility for coordination of the audiovisual

program. Only one school reported having an audiovisual coordinator.
That school was in enrollment group I and offered a Diploma Nursing
Program in a college. Sixteen of the seventeen schools reported
that limited audiovisual secretarial and clerical assistance was
available to their nursing instructors, and five schools indicated
that student audiovisual assistants were used in their audiovisual
programs.

II. AUDIOVISUAL MATERIALS

The Quantitative Standards basically required comprehensive
institutions of higher education to own five hundred college level
sixteen millimeter films, or to rent an average of three films per
instructor per course. The "basic" Quantitative Standards also called
for two thousand filmstrip titles with duplicates as needed, and for
one thousand audio tapes and record discs. None of the seventeen
Diploma and Junior College Schools of Nursing had the number of
sixteen millimeter films, filmstrips or audio tapes and record discs
recommended by the "basic" Standards, nor were they expected to
meet the Standards. Only three schools were reported to own or
have access to any thirty-five millimeter filmstrips.

The Quantitative Standards state that "Due to the state of
the field and the nature of certain media it is extremely difficult,
if not impossible to develop quantitative guidelines for all types
of audiovisual materials (Faris and Sherman, 1966, p. 17)." The
materials referred to included eight millimeter films and three and
one-quarter inch by four inch slides reported in about one-quarter

of the seventeen Diploma and Junior College Schools of Nursing, and two by two inch slides and overhead transparencies reported in about half the schools.

III. AUDIOVISUAL MATERIALS BUDGET

The Quantitative Standards recommend that the basic complement of films, filmstrips and audio recordings be considered capital equipment and be purchased with such funds. To provide for the on-going audiovisual materials program, including maintenance and replacement, but not expansion, no less than one per cent of the average per pupil cost in the school unit should be spent per year per student. The one per cent would include film rentals if no basic film collection is started, and subscription television service, but would not include salaries, building construction or remodeling, closed-circuit television installations, or electronic learning centers (Faris and Sherman, 1966, p. 18).

Direct budgetary comparison of the seventeen Diploma and Junior College Schools of Nursing with the Quantitative Standards was generally not possible as only eight, or about one-half, of all schools reported an audiovisual budget in one form or another for the calendar year 1969. It was not possible to establish whether or not at least one per cent of the average per pupil cost in each school was spent per year, per pupil because none of the seventeen schools reported having an audiovisual budget which provided a fixed amount of money per pupil, per calendar year. Generally, audiovisual materials budget figures were either not known or were unavailable

at the time the survey-questionnaire was completed.

IV. AUDIOVISUAL EQUIPMENT BUDGET

The Quantitative Standards recommend that the capital expenditures necessary to secure the necessary audiovisual equipment should be calculated from the price of the equipment. This figure will vary from school to school due to the range in equipment and the excellence of the programs developed (Faris and Sherman, 1966, pp. 19-21). From the data obtained in this study, no objective comparison with the Standards' recommendations could be made and no subjective estimate could be made. However, eight of the seventeen schools reported having an audiovisual budget to cover the purchase of audiovisual equipment.

V. AUDIOVISUAL EQUIPMENT

The Quantitative Standards for audiovisual equipment are outlined in Appendix E. Table L shows a comparison of the number of teaching stations per unit of selected audiovisual equipment owned by, or available on loan to, the seventeen Alberta Diploma and Junior College Schools of Nursing. It also indicates the Quantitative Standards' recommendations for the "basic" number of teaching stations per unit of equipment. Only units of audiovisual equipment where meaningful comparisons with the Quantitative Standards could be made were tabulated.

Thirteen of the fourteen schools which reported having access to sixteen millimeter motion picture projectors had quantities above

TABLE L

A COMPARISON WITH THE BASIC QUANTITATIVE STANDARDS OF THE NUMBER OF TEACHING STATIONS

PER UNIT OF SELECTED AUDIOVISUAL EQUIPMENT IN SEVENTEEN SCHOOLS

| Type of Audiovisual Equipment | SCHOOL I (1-50) | | | | | SCHOOL II (51-100) | | | | | | SCHOOL III (101-200) | | SCHOOL IV (over 200) | | | | Basic Quantitative Standards |
| | 1 | 2 | 3 | 4* | 5* | 6* | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14* | 15 | 16 | 17 | |
	Unit of Equipment/Number of Teaching Stations																	
Number of instruction rooms***	2	3	3	2	7	-	10	4	6	5	3	7	4	-	12	16	9	
16mm projectors	1/2**	1/3**	1/3**	-	1/1.4**	-	1/10**	1/4**	1/6**	1/5**	1/3**	1/7**	1/4**	-	1/4**	0/16	1/2.5**	1/12 teaching stations
2" x 2" slide projectors	0/2	0/3	0/3	-	1/1.8**	-	0/10	0/4	0/6	0/5	1/3**	1/7**	1/4**	-	1/6**	0/16	1/2.3**	1/10 teaching stations
Filmstrip or combination slide-filmstrip projectors	0/2	1/3**	0/3	-	1/7**	-	0/10	1/4**	1/6**	1/5**	1/3**	1/7**	1/4**	-	1/6**	1/16	1/9**	1/10 teaching stations
All types of overhead projectors	1/2**	0/3	1/3**	-	1/1.3**	-	1/10	0/4	1/6	1/5	0/3	1/7	1/4**	-	1/4**	1/8**	1/4.5	1/4 teaching stations
Record players	0/2	0/3	1/3**	-	1/.9**	-	0/10	0/4	0/5	1/5**	0/3	1/7**	1/2**	-	1/12**	1/16**	1/9**	1/25 teaching stations
Projection screens	1/2	1/3	1/3	-	1/1.6	-	0/10	1/4	0/6	1/5	1/3	1/7	1/4	-	0/12	1/8	1/1.5	1/1 teaching stations

*Indicates schools in a college

**Indicates school meets or exceeds the Basic Quantitative Standards

***Indicates instruction rooms are equivalent to teaching stations

-Indicates figures were not available

the "basic" Quantitative Standards, and ten schools had quantities
of filmstrip or combination filmstrip slide projectors which were
above the "basic" Quantitative Standards. Eight of the fourteen
schools reported quantities of record players above the "basic"
Standards and six schools were above the number of overhead projectors
recommended by the Standards. Only six of the fourteen schools
exceeded the "basic" Quantitative Standards for the number of teaching
stations per unit of two inch by two inch slide projection equipment.
None of the fourteen schools reported having one projection screen
per teaching station. School five in enrollment group II and in a
college, reported quantities of audiovisual equipment which exceeded
the "basic" Standards for five of the six types of audiovisual
equipment cited in Table L. School seven, also in enrollment group
II, had the fewest types of audiovisual equipment in quantities
recommended by the "basic" Quantitative Standards.

Table LI shows a comparison of the number of units of selected
audiovisual equipment per institution owned by, or available on loan to,
the seventeen Alberta Diploma and Junior College Schools of Nursing.
It also indicates the "basic" Quantitative Standards' recommendations
for the number of units of equipment per institution. Units of audio-
visual equipment were tabulated only where meaningful comparisons with
the Quantitative Standards could be made.

Only six of the fourteen schools which reported figures, schools
five and six in enrollment group II and schools fourteen, fifteen, sixteen
and seventeen in group IV, had quantities of eight millimeter reel and

TABLE LI

A COMPARISON WITH THE BASIC QUANTITATIVE STANDARDS OF THE NUMBER OF UNITS OF SELECTED AUDIOVISUAL EQUIPMENT PER INSTITUTION IN SEVENTEEN SCHOOLS

Type of Audiovisual Equipment	I (1-50) UNITS/SCHOOL				II (51-100) UNITS/SCHOOL							III (101-200) UNITS/SCHOOL		IV (over 200) UNITS/SCHOOL				Basic Quantitative Standards
(School)	1	2	3	4*	5*	6*	7	8	9	10	11	12	13	14*	15	16	17	
Number of instruction rooms	2	3	3	2	7	-	10	4	6	5	3	7	4	-	12	16	9	
8mm reel and loop projectors	0	0	0	-	3**	6***	0	0	0	0	0	0	0	4**	1**	2**		1-3 per school
Opaque projectors	0	0	0	-	2**	1**	1**	0	0	0	1**	0	0	4**	1**	1**		1-6 per school
Video tape recorders	0	0	0	-	0	4**	0	0	0	1	0	0	0	16***	1**	0	1**	1 per school
Radio-receivers (AM-FM)	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	3 per school

*Indicates schools in a college   **Indicates school meets or exceeds the Basic Quantitative Standards
-Indicates figures were not available

loop projectors equal to or above the "basic" Quantitative Standards. Schools six, fourteen, fifteen and seventeen had video tape recorders equal to or above the "basic" Standards. In fact, school fourteen in a college had sixteen video tape recorders. None of the fourteen schools reported having radio receivers equal to or above those recommended by the "basic" Standards. Schools six and fourteen in a college, and schools fifteen and seventeen, reported quantities of audiovisual equipment which equalled or exceeded the "basic" Quantitative Standards for three of the four types of audiovisual equipment cited in Table LI. Three of the four schools in enrollment group I and both schools in enrollment group II reported having none of the four types of audiovisual equipment cited in Table LI.

Although the Quantitative Standards did not recommend standards for the number of each type of local production equipment needed to support an audiovisual program, it did list some of the main equipment which is needed for an on-going audiovisual program. About one-third of the schools reported having spirit duplicators, thermal heat copiers, thirty-five millimeter still cameras and equipped photographic darkrooms at their disposal. Other types of local production equipment listed in the Standards generally were not available in the seventeen schools.

The Standards also recommended that every classroom have adequate light control so that all types of projected media can be utilized effectively. However, almost half the schools reported a general lack of room darkening facilities which tended to hinder the use of most types of projected media in their classrooms.

CHAPTER VI

SUMMARY, CONCLUSIONS, RECOMMENDATIONS
AND IMPLICATIONS FOR FURTHER RESEARCH

The main purpose of this study was to establish the status
of audiovisual programs in the seventeen Diploma and Junior College
Schools of Nursing in the Province of Alberta.

The study also involved a comparison, wherever possible,
with the Quantitative Standards For Audiovisual Personnel, Equipment,
and Materials in Elementary, Secondary, and Higher Education (Faris
and Sherman, 1966, pp. 1-21).

This chapter includes a summary of the findings, a summary
of the comparison with the Quantitative Standards, conclusions and
recommendations based upon an analysis of the findings and a review
of the related literature and research, and some implications for
further study.

I. SUMMARY OF THE FINDINGS

Among the seventeen Diploma and Junior College Schools of
Nursing in Alberta, no person in any one position assumed formal
responsibility for coordination of the audiovisual program in each
school. Most schools reported their director assumed main respon-
sibility for coordination of their audiovisual program.

About three quarters of the schools reported locating their
audiovisual equipment and materials in two or more strategic

locations or in one central area separate from the school library. Ten schools reported sharing centralized audiovisual equipment, materials and facilities with personnel in the hospital used for nursing service and four schools in a college or university shared with other faculties.

Less than half the schools had what they considered to be an up-to-date audiovisual materials catalog and about three-quarters of the schools did not select audiovisual materials at regular intervals. About half the schools serviced audiovisual equipment regularly, but the remainder serviced their equipment only when necessary. None of the schools reported their audiovisual equipment was obsolete. Many Diploma and Junior College Schools of Nursing in Alberta allowed students access to school audiovisual equipment and materials on a limited basis.

Sixteen of the seventeen schools had libraries, but six of those reported audiovisual distribution and storage centers separate from the school library. Audiovisual workrooms, equipped photographic darkrooms, electrically wired individual study carrels, closed-circuit television or the wiring for it, and two-way sound systems with classroom controls were not common. No schools reported having a television studio. The major factor hindering the use of audiovisual equipment in about half the schools was the general lack of room-darkening shades or drapes in the instruction rooms.

Only eight of the seventeen schools had an audiovisual budget. In the eight schools which reported having an audiovisual budget, the director was the person most often reported involved in

its preparation and expenditure.

Provisions of the audiovisual budget in seven of the eight schools which had an audiovisual budget included purchase of commercially prepared audiovisual materials and rental of sixteen millimeter motion picture films. No objective reports of the amounts of money allotted for total library and audiovisual budgets were available. It was noted however, that schools in a college included their library and audiovisual budgets in the total library and audiovisual budgets of the college.

Only the four schools in a college reported the opportunity to borrow audiovisual equipment and materials. The sixteen millimeter motion picture projector and the overhead projector were the units of audiovisual equipment most often reported in the seventeen schools. The most common audiovisual materials reported owned by, or available on loan to, the seventeen schools were torsos, models and two inch by two inch slides. Generally, the larger the school enrollment the greater the number of units of audiovisual equipment and materials owned by, or available on loan to, the schools. Schools in a college generally had a greater number and variety of units of audiovisual equipment and audiovisual materials than schools not in a college.

Generally, as school enrollment increased the number of full or part-time instructors per school also increased. Similarly, as school enrollment increased, so did the average professional preparation of the nursing instructors. Approximately sixty per cent of all nursing instructors had at least a Bachelor of Science Degree in

Nursing, and a similar percentage of instructors was between the ages of twenty and thirty years of age. Generally, the larger the school enrollment, the greater was the average number of instructors with one to three years teaching experience, and the fewer number of instructors with four to six, and seven to ten, years of teaching experience. Approximately sixty per cent of all nursing instructors in Alberta's Diploma and Junior College Schools of Nursing had no formal audiovisual training and nearly all remaining instructors had one or more nursing education courses which offered some audiovisual methodology and principles.

School personnel available to assist instructors with audio-visual matters were limited, as nearly sixty per cent of the schools reported people other than school personnel available to assist instructors with audiovisual matters. Limited secretarial audiovisual assistance was available in about two-thirds of the seventeen schools, and a similar fraction of schools reported that student audiovisual assistants were not used. Xerox or other similar copy machines was a unit of local production equipment reported available in about two-thirds of the seventeen schools. The overhead transparency was the most commonly produced audiovisual material in the seventeen schools. About half the schools reported audiovisual materials were drawn from a central area without limitations as to the amounts used. The other schools varied in methods of distribution from central supply areas with formal regulations on amounts used, to making local production materials available on request.

Almost half of all schools did not have audiovisual in-service programs. Of the remaining schools, most reported audiovisual in-service programs on a limited basis of only once or twice per school year. These were usually devoted entirely to teaching instructors proper audiovisual equipment operation. Salesmen were most often reported to present audiovisual in-service demonstrations. Generally, few people from outside the schools were available to conduct audiovisual in-service demonstrations or programs for the nursing instructors. Only about one-third of the seventeen schools reported audiovisual equipment and materials displays and demonstrations at conventions attended by school representatives during the calendar year 1969.

As viewed by the directors, a lack of money was the major barrier to a successful audiovisual program in approximately three-quarters of the schools. About half the Directors reported the lack of time for instructors to explore audiovisual instructional techniques, few good audiovisual materials available, and the lack of audiovisual training of instructors in the operation and utilization of equipment as major barriers.

As viewed by three-quarters of the directors of the seventeen schools, their instructors needed training in the basic and creative utilization of audiovisual equipment and materials. Similarly, about three-quarters of the schools' directors reported that instructors needed time to prepare and preview audiovisual materials, training in audiovisual equipment operation, to make themselves aware of what audiovisual services and materials were available, and frequent

audiovisual in-service programs. About one-half the directors
indicated that instructors needed formal audiovisual coursework and
to take a more active part in the selection of audiovisual equipment
and materials available to nursing educators.

About three-quarters of the directors of the seventeen schools
reported that school administrators needed professional consultation
concerning how to improve existing audiovisual instructional facilities,
and they needed to be regularly informed of the advantages and scope
of audiovisual media application and utilization in nursing education.
About half the directors of the seventeen schools further reported
that administrators needed professional consultation in the area of
audiovisual budgeting and priority spending and that they needed to
be informed by audiovisual manufacturers and suppliers of audiovisual
equipment and materials related to nursing available on the commercial
market. About half the schools also indicated that nursing school
administrators would set more money aside for an expanded audiovisual
program if it were shown that the need was warranted. However, almost
one-third of the seventeen schools indicated a need to convince
administrators of the necessity, value and instructional advantages
of using audiovisual media in nursing education. Similarly, about
one-third of the schools reported that administrators needed some
indication that instructors wanted and needed more audiovisual
materials and equipment for instructional purposes.

If an audiovisual specialist were employed in each school,
fourteen of the seventeen school directors indicated that his or
her main responsibility would be to set up regular audiovisual

in-service programs. Thirteen of the fourteen school directors also
indicated that the audiovisual specialist could evaluate the audio-
visual program, assist instructors in selection of appropriate
audiovisual media for instruction, and keep administrators informed
of each school's audiovisual needs. Eleven schools reported that an
audiovisual specialist might maintain an up-to-date audiovisual
catalog and make minor equipment repairs. Finally, about half the
directors indicated that an audiovisual specialist could develop
policies for selection and utilization of audiovisual media or could
teach minor audiovisual equipment repairs. About one-third of the
schools indicated that an audiovisual specialist could train and
supervise student audiovisual assistants.

II. A SUMMARY OF THE COMPARISON OF THE FINDINGS
OF THIS STUDY WITH THE QUANTITATIVE STAND-
ARDS FOR AUDIOVISUAL PERSONNEL, EQUIPMENT,
AND MATERIALS IN ELEMENTARY, SECONDARY,
AND HIGHER EDUCATION

As a form of higher education Diploma and Junior College
Schools of Nursing may more properly be considered vocational
institutions because of their patient care oriented programs. How-
ever, because of the absence of an acceptable set of quantitative
standards for vocational education institutions, a comparison was
made of the findings of this study with the Quantitative Standards
which were published in 1966. These were an attempt to formulate a
set of quantitative guidelines for the audiovisual communications

field and for schools in elementary, secondary and higher education.
Because it was not possible to collect data suitable for direct com-
parison with the Quantitative Standards in many instances, only a
limited comparison was attempted. The areas reported by Alberta's
Diploma and Junior College Schools of Nursing which were compared
with the Standards included personnel, audiovisual materials budget,
audiovisual equipment budget, and audiovisual equipment. Only the
Standards for higher education were used for purposes of comparison.

The only area in which some Alberta Diploma and Junior College
Schools of Nursing met or exceeded the Quantitative Standards was in
the area of "basic" quantities of audiovisual equipment. The sixteen
millimeter motion picture projector was the one unit of equipment
most frequently reported in quantities which met or exceeded the Basic
Quantitative Standards' recommendations. No schools met or exceeded
the Quantitative Standards for projection screens or radio receivers,
and only a limited number of schools met or exceeded the "basic"
Standards' recommendations for each of the other units of audiovisual
equipment where meaningful comparisons could be established.

III. CONCLUSIONS

The following conclusions were reached after a review of
related research and literature in nursing education, consideration
of the non-directive interviews and an analysis of the data obtained
from the survey-questionnaires. It should be noted that these
conclusions apply only to the Diploma and Junior College Schools of

Nursing in the Province of Alberta. Also, it should be noted that in arriving at these conclusions, the limitations of the questionnaire method of collecting data were considered.

1. Formal coordination of each school's audiovisual program, by someone with formal audiovisual preparation, was not reported in most Diploma and Junior College Schools of Nursing in the Province of Alberta. The director of the school generally assumed main responsibility for coordination of the audiovisual program, including preparation and expenditure of the school audiovisual budget and selection and evaluation of audiovisual equipment and materials. Audiovisual coordinators were almost non-existent, and few schools had an audiovisual committee.

2. The average professional preparation of nursing instructors generally increased as school enrollment increased. Formal audiovisual preparation of nursing instructors was almost non-existent, although some instructors were reported to have completed one or more nursing education courses where part of the instruction dealt with audiovisual teaching methods and materials.

3. Most Diploma and Junior College Schools of Nursing in Alberta did not have an audiovisual budget, and those schools which did have an audiovisual budget did not maintain accurate records of expenditures. With or without an audiovisual budget few schools reported provisions for the rental or purchase of audiovisual materials, equipment, local production supplies, in-service programs, or for audiovisual equipment maintenance.

4. Physical facilities for the classroom use of audiovisual media in many Alberta Diploma and Junior College Schools of Nursing were inadequate according to data gathered by the survey-questionnaire. The larger the school enrollment, the greater the proportion of instruction rooms with adequate room darkening facilities, permanently mounted projection screens, front and rear room light controls, one electrical outlet on each wall, and adequate display space. Specialized audiovisual facilities were almost non-existent.

5. Most Diploma and Junior College Schools of Nursing in this study centralized their audiovisual materials and equipment in areas separate from the school library. Most schools shared audiovisual resources and facilities with other faculties, professional and hospital nursing service personnel. A comprehensive and up-to-date catalog of school audiovisual materials and equipment, and a regular schedule for maintenance, evaluation or selection of equipment and materials was not present in most schools.

6. The data collected indicate that the quantity and variety of audiovisual equipment and materials in schools increased as student enrollment increased. Schools in a college had a greater quantity and variety or audiovisual equipment and materials than schools not in a college. Schools which offered a nursing education program in a college could borrow audiovisual equipment and materials from those institutions' audiovisual centers, while those schools not in a college had to purchase, and thus assume ownership of all their

equipment and materials.

7. Few Alberta Diploma and Junior College Schools of Nursing
have implemented programs for local production of audiovisual materials.
Most schools have little of the audiovisual equipment, materials and
facilities for local production which were cited in the survey-
questionnaire. A very limited number and variety of audiovisual
materials have been produced in Alberta's seventeen Diploma and
Junior College Schools of Nursing.

8. Regular and comprehensive audiovisual in-service programs
for nursing instructors have not been developed in most Alberta
Diploma and Junior College Schools of Nursing. When held, most audio-
visual in-service programs were devoted almost entirely to the
operation of audiovisual equipment. Qualified audiovisual personnel
from within the schools or from sources outside the schools, were
generally not available to assist or consult with, nursing instructors
with regards to audiovisual matters. Student audiovisual assistance
and student access to audiovisual materials, equipment, and facilities
were generally not reported.

9. The major barriers to an improved audiovisual program
reported by directors of the schools were a lack of financial support,
a lack of time for instructors to prepare, preview and explore the
instructional possibilities of audiovisual media, a lack of good
nursing education audiovisual materials relating to nursing education,
and a lack of training of nursing instructors in audiovisual instruc-
tional methods.

IV. RECOMMENDATIONS

One of the purposes of this study was to make recommendations for the improvement of audiovisual programs in Diploma and Junior College Schools of Nursing in the Province of Alberta. The findings seem to indicate there is justification for the following recommendations.

1. The Diploma and Junior College Schools of Nursing in the Province of Alberta should have qualified audiovisual coordinators with sufficient released time to develop the audiovisual programs. An audiovisual coordinator in each school is needed to coordinate regular audiovisual in-service programs, to evaluate all aspects of the audiovisual program, to maintain a comprehensive and up-to-date catalog of relevant audiovisual materials and equipment available to nursing educators, and to coordinate procurement, maintenance and scheduling of all audiovisual equipment and materials needed by nursing instructors. Nursing instructors in each school need someone knowledgeable in the areas of audiovisual media selection, preparation and utilization with whom they can consult in order to make effective use of audiovisual media in their teaching.

2. The problem of inadequate audiovisual facilities for the use of audiovisual media in existing instruction rooms and for the local production of audiovisual materials should be studied by Diploma and Junior College Schools of Nursing administrators with a view to planning necessary alterations. When planning future school construction and expansion minimum audiovisual facility

standards should be established. Similarly a set of standards is
needed to asses emerging audiovisual programs in all Diploma and
Junior College Schools of Nursing. The Committee on Nursing Education
in conjunction with audiovisual specialists in the Faculties of
Education in Alberta's Universities should develop a set of standards
for Alberta's Nursing education audiovisual needs with more concern
than just counting pieces of equipment or the facilities available.
These standards would help nursing educators plan for future
audiovisual program development.

4.   All Diploma and Junior College Schools of Nursing should
be required to maintain comprehensive and detailed audiovisual budgets.
Preparation of each school's audiovisual budget should be calculated
on some type of base that would bring all Diploma and Junior College
Schools of Nursing audiovisual programs up to an adequate and
standardized level. All persons directly involved with any aspect
of any school's audiovisual program should be consulted in order to
assure all necessary provisions are included in that school's audio-
visual budget.

5. In an attempt to cope with the inequalities in audiovisual
programs among the small and large enrollment group schools, the
Committee on Nursing Education should investigate the possibility of
establishing cooperative district and/or provincial audiovisual
media centers,perhaps operating out of Edmonton and Calgary. These
centers, if designed and specifically operated to meet Alberta nursing
education needs, could offer a wide range of audiovisual services,
personnel, cataloging services, materials and equipment not now available

to most Diploma and Junior College Schools of Nursing in the Province of Alberta. The Directors of these centers should have at least a Master's Degree in audiovisual communications and be able to relate well to nursing education;.

6. An advisor, specially trained in audiovisual communications and with the ability to work in the nursing education field, should be appointed for the province by the Committee on Nursing Education. On the basis of the data obtained in this study, this advisor is needed to: (a) provide nursing education administrators with professional audio-visual consultation concerning how to improve existing audiovisual facilities and how to set up priority spending procedures (b) keep nursing education administrators regularly and accurately informed of the scope and advantages of using audiovisual media in nursing education (c) give nursing education administrators an indication that instructors want and need more audiovisual media (d) inform nursing education administrators of the audiovisual media available to nursing education (e) involve nursing education administrators in the preparation of the audiovisual budget, in in-service activities, and in helping to solve school audiovisual instructional problems.

V. IMPLICATIONS FOR FURTHER RESEARCH

The findings of this study and review of available Canadian research in this area indicate that there is a need for research in all aspects of audiovisual media related to nursing education. Several specific suggestions resulting from this study are the following:

1. Because of the importance of utilization practice relating to audiovisual media, research should be done to determine the extent and effectiveness of the use of audiovisual media in Alberta Diploma and Junior College Schools of Nursing. This would serve to determine what remedial steps should be taken in order to improve audiovisual media utilization by nursing instructors.

2. The attitudes of the people involved in any audiovisual program are vital to the program's success or failure. A study should be done to assess the attitudes of administrators, instructors, and students of Alberta's Diploma and Junior College Schools of Nursing toward audiovisual media utilization and the effect of these attitudes upon the development of audiovisual programs.

3. Data from this study indicated that financing of audio-visual programs in Alberta Diploma and Junior College Schools of Nursing is inadequate. A study of financing of audiovisual media programs with recommendations for improvement should be undertaken.

4. Research should be done to explore the feasibility of establishing district or Provincial audiovisual media centers for Diploma and Junior College Schools of Nursing which would provide audiovisual personnel and services to a number of schools.

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APPENDICES

A P P E N D I X   A

COVER LETTER SENT WITH THE

SURVEY-QUESTIONNAIRE

9505 - 80 Street Apt. 303
Edmonton, Alberta
June 2, 1970

Dear Director of Nursing:

A study to determine the present status of audiovisual
programs in the Schools of Nursing in the Province of
Alberta is being undertaken as part of a Master of Education
program at the University of Alberta. The Advisor to the
Schools of Nursing for Alberta, Miss Margaret Steed, has
endorsed the study. We believe that the data to be collect-
ed may contribute to the Provincial Instructional Program
and serve as a basis for assessing Provincial trends and
needs in the area of audiovisual instruction.

The enclosed questionnaire is one of 17 addressed to
the Schools of Nursing in the Province of Alberta. It is
requested that you please complete the questionnaire by
approximately June 18, 1970, at which time the investigator
will arrange to pick it up personally.

All answers will be confidential with no individual or
school identified.

Please DO NOT return the questionnaire by mail; the
investigator would prefer to visit with you personally and
discuss any problems you may have encountered in completing
the questionnaire.

The time involved in completing the questionnaire is
estimated to be approximately 30 minutes. With a sample
of relatively small size, you will understand how vital
your contribution to the study will be.

Thank you for your assistance.

Yours sincerely,

W. Linton Delainey

W. Linton Delainey

WLD/cbs

APPENDIX   B

SURVEY QUESTIONNAIRE SENT TO DIPLOMA AND

JUNIOR COLLEGE SCHOOLS OF NURSING IN ALBERTA

(The original survey-questionnaire was
condensed onto four 11" x 14" pages)

DEFINITION OF TERMS:

1. A.V. MATERIALS: generally refers to any and all materials used in classroom instruction except those that use verbal symbols (printed) only.

2. A.V. EQUIPMENT: generally refers to only the hardware or instrument (e.g. a motion picture projector) used to facilitate the use of A.V. MATERIALS (e.g. a motion picture film).

3. A.V. PROGRAM: the overall plan to coordinate A.V. materials, equipment, facilities, budgets, personnel, organization, maintenance, local production, in-service, utilization and evaluation.

GENERAL INSTRUCTIONS:

1. This questionnaire should be completed by the Director of the School of Nursing

2. ALL replies will be coded and held in COMPLETE CONFIDENCE

3. NO individual or school will be identified in the report of this study

4. Answers should refer to the STATUS AS OF MAY 1970, unless a question specifically asks for the calendar year 1969

5. Where exact data cannot be given, please give a close approximation

DIRECTIONS:

1. Blanks require a number (e.g. __25__)

2. Multiple choice questions require you to make ONE CHOICE by "circling" the letter preceding that choice, UNLESS you are specifically asked to CIRCLE ALL THAT APPLY

1. ORGANIZATION

1. Total Nursing Student enrollment is: _____

2. Place your school in a cetegory!

   a. Diploma Nursing Program conducted under administrative control of a hospital governing board

   b. Diploma Nursing Program in a College

   c. Baccalaureate Degree Nursing Program conducted under administrative control of a hospital governing board

   d. Psychiatric Nursing Program conducted under administrative control of a hospital governing board

3. The approximate population of the surrounding community is: _____

4. Number of years school has operated is: _____

5. Who assumes main responsibility for coordination of the A.V. Program?

   a. Director of Nursing Education

   b. A.V. committee

   c. Librarian

   d. A.V. coordinator (name may vary)

   e. no one

   f. other (specify) _____

6. How many years has your school had coordination of an A.V. Program?

   a. ever since it began operation

   b. never had coordination

   c. other (specify) _____

7. An A.V. committee: (CIRCLE ALL THAT APPLY)

   a. does not exist in this school

   b. exists, but serves little purpose

   c. is made up of school faculty

   d. includes members from other departments or faculties from outside the school itself e.g. hospital staff

8. A.V. equipment and materials belonging to the school are located mainly in:

   a. the library

   b. one central area or classroom separate from the library

   c. two or more areas located strategically throughout the school

   d. other (specify) _____

9. Centralized A.V. equipment, materials, services and production facilities are: (CIRCLE ALL THAT APPLY)

   a. shared with nursing service personnel or professional personnel in the hospital

   b. shared with other faculties at the College or University

   c. other (specify) _____

10. A comprehensive and up-to-date catalog of A.V. materials is maintained by:

    a. the librarian

    b. an A.V. committee

    c. instructors in their own subjects

    d. does not exist in this school

    e. other (specify) _____

11. Selection of A.V. equipment and material is: (CIRCLE ALL THAT APPLY)

    a. done at regular intervals

    b. not done at regular intervals

    c. done by the A.V. committee

    d. done by the A.V. coordinator

    e. done by the Director of Nursing

    f. done by individual faculty members who may then purchase items using the A.V. budget

    g. done by the librarian

    h. other (specify) _____

12. Purchase of A.V. equipment & material is done by: (CIRCLE ALL THAT APPLY)

    a. Director of Nursing

    b. the A.V. coordinator

    c. individual faculty members

    d. librarian

    e. other (specify) _____

13. School A.V. equipment is: (CIRCLE ALL THAT APPLY)

    a. serviced regularly

    b. replaced when obsolete

    c. serviced only when required

    d. replaced regularly, even if it is NOT obsolete

    e. obsolete in most cases

14. Nursing students in this school have:

    a. access to A.V. equipment and materials
       on the same basis as library books

    b. access to A.V. equipment and materials
       when supervised

    c. little or no access to A.V. equipment
       and materials

    d. other (specify) _____
       _____

2. FACILITIES

1. Facilities in this school include:
   (CIRCLE ALL THAT APPLY)

    a. a library

    b. equipped photographic darkroom

    c. a special A.V. projection theatre

    d. A.V. office space separate from the library

    e. an A.V. distribution and storage center or
       room which is separate from the library

    f. combined A.V.-library location for distribu-
       tion and storage of A.V. equipment, materials
       and library books

    g. adequate storage space for "spare" A.V.
       equipment, materials, supplies and replace-
       ment parts

    h. A.V. workroom or other space designated
       for instructors to prepare their own A.V.
       materials

    i. wiring for closed-circuit television

    j. closed-circuit television

    k. television studio

    l. electrically wired individual study carrels

    m. 2-way central sound system (intercom) with
       classroom control

2. <u>How many</u> classrooms, laboratories, lecture halls, seminar rooms etc. are regularly used for instruction?

   _____

3. Which of the following factors hinder the use of records, tapes, radio, T.V., or projected materials in regular areas of instruction? (<u>CIRCLE ALL THAT APPLY</u>)

   a. poor acoustics

   b. lack of convenient electrical outlets

   c. general lack of room-darkening shades or drapes

   d. poor T.V. and radio reception

   e. inadequate ventilation during room darkening

   f. other (specify) _____

4. How many of the classrooms, lecture halls, laboratories, seminar rooms etc. have the following facilities?

   _____room darkening facilities

   _____permanently mounted 60" x 60" or larger projection screens

   _____front and rear room light controls

   _____at least one electrical outlet on each wall

   _____adequate display space for flat pictures, charts, exhibits, models and demonstrations

3. <u>BUDGET</u>

*** <u>ALL</u> BUDGET QUESTIONS REFER TO THE <u>CALENDAR YEAR 1969</u>

   1. In 1969, this school's A.V. budget for purchase of A.V. equipment and materials: (<u>CIRCLE ALL THAT APPLY</u>)

      a. did not exist (IF an A.V. budget did not exist, <u>disregard</u> questions 2 through 8)

      b. provided a fixed amount per pupil

      c. was not fixed; funds were available and we spent as the need arose

      d. was independent of the library budget

      e. was a percentage of library budget

      f. other (specify) _____

   2. <u>Who prepared</u> the 1969 A.V. budget for your school? (<u>CIRCLE ALL THAT APPLY</u>)

      a. the Director of Nursing

      b. administrative governing board

      c. the librarian

      d. the A.V. committee

      e. the A.V. coordinator

      f. other (specify) _____

   3. Who expended the 1969 A.V. budget for your school? (<u>CIRCLE ALL THAT APPLY</u>)

      a. Director of Nursing

      b. administrative governing board

      c. A.V. committee

      d. librarian

      e. A.V. coordinator

      f. other (specify) _____

4. The A.V. budget during 1969 provided for:
   (<u>CIRCLE ALL THAT APPLY</u>)

   a. purchase of commercially prepared A.V.
      materials e.g. films, etc.

   b. purchase of A.V. equipment

   c. payment of postage and rental fees
      for items other than 16mm films

   d. rental of 16mm films

   e. purchase of supplies and equipment
      used in the preparation of A.V.
      materials by instructors

   f. purchase of expendable A.V. supplies,
      equipment replacement parts and
      materials as needed throughout the year

   g. servicing of equipment by commercial
      maintenance personnel

   h. other (specify) _____
      _____

5. What was your total library (printed materials)
   budget for 1969?

   $_____

6. What was your total A.V. budget for 1969?

   $_____

7. <u>How much</u> of the total A.V. budget in 1969
   was allotted for equipment purchase?

   $_____

8. <u>How much</u> of the total A.V. budget in 1969 was
   allotted to A.V. material purchase?

   $_____

4. <u>AUDIOVISUAL INVENTORY</u>

   1. Indicate the approximate <u>number</u> of each type
       of <u>A.V. equipment</u> your school owns!

       _____16mm sound motion picture projectors

       _____8mm film loop cartridge projectors

       _____8mm film projectors (reel type)

       _____combination 35mm slide-filmstrip
               projectors

       _____35mm filmstrip (only) projectors

       _____35mm 2" x 2" slide (only) projectors

       _____overhead projectors

       _____opaque projectors

       _____micro-projectors

       _____television receivers

       _____video (television) tape recorder
               with camera

       _____portable equipment carts

       _____portable projection screens

       _____microfilm readers

       _____tape recorders (all types)

       _____radios AM-FM

       _____record players

       _____portable public address system

       _____other (specify) _____

       _____

2. Indicate the approximate <u>number</u> of each
    type of <u>A.V. material</u> your school <u>owns</u>!

    _____16mm films (sound)

    _____8mm cartridge loop films

    _____8mm films (sound or silent)

    _____35mm filmstrips

    _____2" x 2" slides

    _____3 1/4" x 4" slides

    _____overhead transparencies (all types)

    _____video (television) tape recordings

    _____audio tapes

    _____demonstration models

    _____records

    _____manikins (torsos)

    _____preserved specimens

    _____other (specify) _____

5. <u>PERSONNEL</u>

    1. <u>Total number</u> of full-time and regular
        part-time Nursing Instructors is:

        _____

    2. <u>How many</u> of the Nursing Instructors
        mentioned in question 1. above <u>are</u>:

        _____20-25 years old

        _____26-30 years old

        _____31-35 years old

        _____36-40 years old

        _____over 40 years old

3. How many of the Nursing Instructors mentioned in question 1. above have:

_____a B.Sc. Degree in Nursing

_____a University Diploma in Nursing

_____an R.N. ONLY

_____other (specify) _____

4. How many of the Nursing Instructors mentioned in question 1. have:

_____less than 1 year teaching experience

_____1-3 years teaching experience

_____4-6 years teaching experience

_____7-10 years teaching experience

_____over 10 years teaching experience

5. How many Nursing Instructors (including the Director of Nursing) have:

_____1 University/College A.V. course

_____2 to 3 University/College A.V. courses

_____more than 3 University/College A.V. courses

_____1 or more Nursing Education courses where part of the instruction dealt with A.V. teaching methods and materials

_____no formal training in A.V. at all

6. <u>Within</u> the school itself, Nursing Instructors may obtain assistance in the operation, selection, preparation and utilization of A.V. equipment and materials from (<u>CIRCLE ALL THAT APPLY</u>)

    a. members of the A.V. committee

    b. one faculty member selected or appointed to coordinate and assist in A.V. matters

    c. the librarian, who <u>has</u> some formal A.V. training

    d. the librarian, who has <u>no</u> formal A.V. training

    e. no one

    f. other (specify) _____

7. How <u>many hours</u> release time from regular duties is the person or persons indicated in question 6. given to spend on A.V. duties or in consultation with instructors?

    _____ _____ hours

8. Secretarial or clerical assistance is available to Nursing Instructors for: (<u>CIRCLE ALL THAT APPLY</u>)

    a. preparing machine-made overhead transparencies

    b. duplicating "hand-outs"

    c. scheduling A.V. equipment and materials for classroom use

    d. ordering and returning special A.V. equipment and materials from sources outside the school

    e. not available

    f. other (specify) _____

9. Student A.V. assistants: (CIRCLE ALL THAT APPLY)

    a. are not used in this school

    b. pick-up A.V. material and equipment
       from the A.V. storage room or center
       or library and return them after use
       by the instructor

    c. help instructors prepare some A.V.
       materials

    d. assist in minor equipment maintenance
       e.g. change projector bulbs

    e. help with clerical work e.g. typing
       or duplicating

    f. operate A.V. equipment for instructors
       during class periods

    g. are trained in A.V. equipment operation
       before allowed to operate the equipment

    h. other (specify) _____

6. LOCAL PRODUCTION

1. Facilities, equipment and materials
available to instructors to produce
their own A.V. materials for
instructors include:
(CIRCLE ALL THAT APPLY)

    a. 8mm or 16mm motion picture camera

    b. 35mm still camera

    c. dry-mount press and mounting materials

    d. mechanical lettering equipment

    e. dry-transfer lettering (pressure sensitive)

    f. spirit duplicator (Dittor)

    g. thermal process copier (Thermofax)

    h. Xerox or similar copy machine

    i. other (specify) _____

2. A.V. materials that were produced in your
    school during the 1969 calendar year
    include: (CIRCLE ALL THAT APPLY)

    a. photographs (prints)

    b. 2" x 2" slides

    c. 3 1/4" x 4" slides

    d. mounted pictures

    e. 8mm or 16mm motion picture films

    f. 8mm loop cartridge films

    g. 35mm filmstrips

    h. television video tapes

    i. audio tapes

    j. overhead transparencies

    k. other (specify) _____

3. Supplies for local production of A.V.
    materials for instructors are:

    a. not used in this school

    b. limited by subject area quotas

    c. drawn from a central supply area with
       formal regulations on amounts used

    d. limited by a per-teacher quota

    e. drawn from a central supply area
       with NO formal regulations on
       amounts used

    f. other (specify) _____

7. IN-SERVICE

1. An in-service A.V. training program for instructors: (CIRCLE ALL THAT APPLY)

   a. does not exist at the present time

   b. exists on a limited basis e.g. once or twice per school year

   c. is conducted three or more times per school year

   d. when held is almost entirely devoted to teaching instructors proper A.V. equipment operation

   e. includes workshops, lectures and demonstrations by guest speakers specializing in A.V. methods and techniques

   f. when held includes not only proper operation of A.V. equipment, but also selection and utilization techniques

   g. is not needed because all instructors know how to use and prepare all types of A.V. equipment and materials

   h. other (specify) _____

2. The following people present in-service demonstrations to the school faculty on occasion (CIRCLE ALL THAT APPLY)

   a. salesmen

   b. A.V. coordinator (title may vary)

   c. Director of Nursing

   d. Individual Nursing Instructors

   e. Librarian

   f. Department of Education Personnel

   g. University/College personnel

   h. other (specify) _____

3. Salesmen representing companies selling
   A.V. equipment, materials or services
   most often consult with the:
   (CIRCLE ALL THAT APPLY)

   a. Director of Nursing

   b. A.V. coordinator

   c. individual Nursing Instructors

   d. Librarian

   e. Administrative governing board of
      the school

   f. other (specify) _____

4. Indicate which of the following were part of
   any of the conventions you attended during
   the calendar year 1969

   a. displays of A.V. equipment

   b. displays of A.V. materials (not books
      or other printed matter)

   c. demonstration lessons on the use of A.V.
      equipment and materials

   d. guest speakers in the A.V. field

   e. no sign or mention of A.V. media

   f. other (specify) _____

5. Outside the school locally, Nursing
   Instructors may obtain assistance or take
   course work in the operation, selection,
   preparation and utilization of A.V.
   equipment and materials from:
   (CIRCLE ALL THAT APPLY)

   a. a University or College

   b. one or more volunteer separate or
      public school personnel trained in
      A.V. techniques and methodology

   c. A.V. equipment and materials sales
      representatives

d. a University or College level specialist
   in A.V. communications and techniques

e. other (specify) _____

8. BARRIERS TO THE A.V. PROGRAM

    1. Below is a list of difficulties or barriers
   which educators have experienced in trying
   to execute a successful A.V. program: (CIRCLE
   ALL THE DIFFICULTIES OR BARRIERS WHICH YOU
   FEEL ARE EVIDENT IN YOUR SCHOOL)

    a. lack of money

    b. administration not convinced of the value
   of A.V. media

    c. students see A.V. as entertainment

    d. inadequate equipment servicing

    e. A.V. equipment is obsolete

    f. much of the equipment is too hard
   to operate

    g. A.V. equipment and materials are too
   expensive for results achieved

    h. A.V. equipment and materials within
   the school cannot always be available
   when needed

    i. inadequate classroom facilities for
   use of A.V. equipment and materials

    j. some subject areas have few good
   A.V. materials available

    k. instructors are generally not trained
   in operation and utilization of A.V.
   equipment and materials

    l. inadequate A.V. storage space

    m. inadequate local production facilities

    n. insufficient quantities of A.V. equipment
   or material located in this school

o. no inventory program set up to discard "weak" A.V. equipment and material

p. no regular or planned evaluation of the A.V. program

q. teacher indifference

r. building design does not allow easy distribution of A.V. equipment and materials

s. instructors complain of too much "red tape" in ordering and scheduling A.V. equipment and materials

t. A.V. equipment and materials within the school cannot always be available where needed

u. student body and school building too small to justify the use of some A.V. equipment

v. lack of storage space for A.V. equipment and materials

w. faculty members do not have enough time to explore A.V. instructional techniques outside their regular teaching duties

x. others (specify) _____

_____

9. <u>EVALUATION</u>

1. In order to improve the utilization of A.V. equipment and materials in this school, instructors need: (<u>CIRCLE ALL THAT APPLY</u>)

a. an up-to-date study guide or catalog of recommended A.V. materials for nursing

b. time to prepare A.V. materials or to preview them

c. training in the operation of A.V. equipment

d. training in the basic and creative utilization of A.V. equipment and materials

e. to make themselves aware of what is available in the A.V. field, and what services are offered by the many companies selling A.V. equipment and materials

f. frequent in-service workshops to become familiar with new developments in the A.V. field

g. formal preparation and education in A.V. methods and theory

h. a person specially trained in A.V. communications (either full or part-time) with whom they can consult or receive help in any area of A.V. instruction

i. to take an active part in the selection of A.V. equipment and materials available to nursing education

j. other (specify) _____

2. Administrators of the school, including the Director of Nursing: (CIRCLE ALL THAT APPLY)

a. need to be convinced of the necessity, value and instructional advantages of using A.V. media in Nursing Education

b. need professional advice as to how to improve existing A.V. instructional facilities

c. need professional consultation in areas of A.V. budgeting and priority spending for A.V. equipment and materials

d. need an indication that instructors want and need more A.V. equipment and materials for instruction

e. would set more money aside for an expanded A.V. program if the need were warranted

f. need to be informed by manufacturers and suppliers of A.V. equipment and material available to Nursing Educators

g. need to be regularly informed of the advantages and scope of A.V. media application and utilization

3. If this school had one person specially trained in A.V. on a full or part-time basis, this person could assume the following responsibilities:
(CIRCLE ALL THAT APPLY)

a. keep A.V. collection functional by systematic "weeding"

b. keep up-to-date A.V. inventories and maintenance schedules

c. coordinate procurement by individual subject areas and instructors of A.V. equipment and material, including rented A.V. equipment and materials

d. make minor equipment repairs

e. prepare, or assist instructors in preparing specialized A.V. materials

f. constantly evaluate the A.V. program

g. set-up regular in-service workshops to teach instructors the operation of A.V. equipment as well as basic and creative utilization of A.V. media

h. assist instructors in proper selection of appropriate A.V. equipment and material for their particular teaching requirements

i. exercise leadership in the development of policies for selection and use of A.V. media

j. keep chief school administrators (including the Director of Nursing) informed of the needs and services relating to the A.V. program

    k. teach instructors minor repair techniques
       e.g. change projector bulbs

    l. train and supervise student A.V. assistants

THANK-YOU FOR YOUR EFFORTS: PLEASE USE THE BACK OF THIS
PAGE FOR CRITICISMS OR COMMENTS

A P P E N D I X   C

DIPLOMA AND JUNIOR COLLEGE SCHOOLS
OF NURSING IN ALBERTA AS OF JULY 1970

TABLE LII

DIPLOMA AND JUNIOR COLLEGE SCHOOLS OF NURSING IN ALBERTA AS OF JULY 1970

NAME OF SCHOOL	ENROLLMENT	LOCATION	COMMUNITY POPULATION	YEARS OF COORDINATION OF A.V. PROGRAM	YEARS OF OPERATION	SIZE OF FACULTY
UNIVERSITY OF ALBERTA HOSPITAL SCHOOL OF NURSING	322	Edmonton	450,000	2	47	46
EDMONTON GENERAL HOSPITAL AND ST. JEAN COLLEGE	75	Edmonton	450,000	0	2	12
MISERICORDIA HOSPITAL	115	Edmonton	450,000	0	63	17
CALGARY GENERAL HOSPITAL	293	Calgary	380,000	0	75	29
HOLY CROSS HOSPITAL	137	Calgary	380,000	2	63	14
FOOTHILLS PROV- INCIAL GENERAL HOSPITAL	260	Calgary	380,000	1	5	22
MOUNT ROYAL COLLEGE	79	Calgary	380,000	3	3	16
MEDICINE HAT GENERAL HOSPITAL	33	Medicine Hat	26,000	0	65	9

TABLE LII (continued)

DIPLOMA AND JUNIOR COLLEGE SCHOOLS OF NURSING IN ALBERTA AS OF JULY 1970

NAME OF SCHOOL	ENROLLMENT	LOCATION	COMMUNITY POPULATION	YEARS OF COORDINATION OF A.V. PROGRAM	YEARS OF OPERATION	SIZE OF FACULTY
LETHBRIDGE MUNI-CIPAL HOSPITAL	91	Lethbridge	39,000	10	60	9
LETHBRIDGE COM-MUNITY COLLEGE	25	Lethbridge	39,000	1	1	3
ST. MICHAEL'S HOSPITAL	99	Lethbridge	39,000	0	17	10
ARCHER MEMOR-IAL HOSPITAL	40	Lamont	900	0	23	8
ALBERTA HOS-PITAL PONOKA	80	Ponoka	4,000	0	30	15
ST. JOSEPH'S GENERAL HOSPITAL	28	Vegreville	4,000	0	55	2
RED DEER COLLEGE	56	Red Deer	26,000	2	2	6
ALBERTA HOSPITAL	94	Edmonton	450,000	0	25	10
ROYAL ALEX-ANDRA HOSPITAL	328	Edmonton	450,000	15	65	30

A P P E N D I X   D

SELF-ADDRESSED-STAMPED CARD

SENT WITH SURVEY-QUESTIONNAIRE

#_____

PLEASE COMPLETE THE TWO QUESTIONS BELOW
AND MAIL THIS SELF-ADDRESSED-STAMPED
CARD AS SOON AS POSSIBLE TO CONFIRM THAT
YOU HAVE RECEIVED THE ENCLOSED SURVEY

  1. I have received the enclosed survey

  2. I plan to have the survey completed
     by _____

THIS SCHOOL'S PHONE NUMBER IS_____

W. LINTON DELAINEY

9509-90 St. Apt. #303

Edmonton 82, Alberta

A P P E N D I X   E

THE QUANTITATIVE STANDARDS FOR AUDIOVISUAL
PERSONNEL, EQUIPMENT AND MATERIALS IN ELE-
MENTARY, SECONDARY AND HIGHER EDUCATION AS
PUBLISHED BY THE DEPARTMENT OF AUDIOVISUAL
INSTRUCTION IN JANUARY, 1966

QUANTITATIVE STANDARDS FOR AUDIOVISUAL PERSONNEL
EQUIPMENT AND MATERIALS

(In Elementary, Secondary, and Higher Education)

Developed by Dr. Gene Faris and Dr. Mendel Sherman, Audiovisual
Center, Indiana University, as part of a study conducted under the
auspices of the United States Office of Education, National Defense
Education Act, Title VII, Part B. Program.

Adopted by

The Department of Audiovisual Instruction, NEA, at the Board of
Directors Meeting in Washington, D. C., on October 30, 1965

and

The Association of Chief State School Audiovisual Officers at the
Executive Board Meeting in Chicago on December 14, 1965

Published by

Department of Audiovisual Instruction
National Education Association
1201 Sixteenth Street N.W.
WASHINGTON, D.C., 20036

January 1966

FORWARD

Administrators of audiovisual programs have long recognized that the
lack of nationally established standards has been a major deterrent to
an adequate supply of properly utilized materials and equipment. Num-
erous efforts have been made at local levels to establish standards
but these have been relatively ineffective. Even while formulating
their own individual school standards, audiovisual coordinators were
pleading for city-wide standards, the cities for state-wide and for the
past decade at least, states have requested national standards.

The standards in the pages which follow represent a stage in a study to
"Formulate Quantitative Guidelines for the Audiovisual Communications
Field." This study by Dr. Gene Faris and Dr. Mendel Sherman is in pro-
gress under the auspices of an NDEA Title VII research contract. The
final research report will include a rationale for the standards in
addition to visualized case studies of several schools which approxi-
mate the standards. Four main categories are included in the standards;
personnel, materials, equipment and budget.

The standards have progressed through seven stages in their prepara-
tion:

1. A tentative set of quantitative guidelines for selected materials
    and equipment were formulated by a national committee at the 1963
    annual conference of the Department of Audiovisual Instruction.

2. Reactions to these quantitative guidelines and suggestions from
    audiovisual specialists in various institutions throughout the
    nation were gathered and consolidated by Dr. Gene Faris. The
    modified guidelines were reported in the March 1965 issue of
    Audiovisual Instruction.

3. At the June 1965 meeting of the DAVI Executive Committee, the
    quantitative guidelines as reported in the March 1965 issue of the
    Audiovisual Instruction were adopted officially by the organiza-
    tion.

4. In October, 1965, a nationally selected seminar of audiovisual
    specialists, functioning under the auspices of the NDEA Title VII
    Faris-Sherman research contract modified and expanded the official
    DAVI 1965 quantitative guidelines. Members of the seminar include:

            TED COBUN, Director, Audiovisual Education
              Niles Township Community High Schools, Skokie, Illinois
            AMO DeBERNARDIS, President, Portland Community College,
              Portland Public Schools, Portland, Oregon
            PAUL FLYNN, State Supervisor, Audiovisual Education
              North Carolina State Department of Public Instruction,
              Raleigh, North Carolina

WILLIAM FULTON, Professor of Education, University of
   Oklahoma, Norman, Oklahoma
ROBERT GERLETTI, Director, Division of Audiovisual
   Education, Los Angeles County Schools, Los Angeles,
   California
HARRY JOHNSON, Director, Audiovisual Center, Virginia
   State College, Petersburg, Virginia
WILLIAM KING, State Supervisor, Department of Education,
   State Department of Education, Trenton, New Jersey
MARCUS KONICK, Director, Bureau of Instructional Mater-
   ials, Pennsylvania Department of Public Instruction,
   Harrisburg, Pennsylvania
JAMES MEAGHER, Coordinator, Audiovisual Instructional
   Materials, Penfield Central Schools, Penfield, New York
LESLIE NELSON, Professor of Education, California State
   College, Los Angeles, California
WILLIAM PRIGGE, Director, Audiovisual Department,
   Illinois State College, Normal, Illinois
LeROY SIMONSON, Administrative Assistant, Ft. Dodge
   Schools, Ft. Dodge, Iowa

In three days of deliberation, members of the Seminar
studied earlier standards and guidelines which had been
formulated by various organizations through the years.
Their own vast experiences and constant contact with the
field, however, constituted the major resources for the
final decisions which were made.

Specified quantities of materials, equipment, and budget
and statements related to personnel were placed in
columns designated as "basic" and "advanced".

The "basic" specifications represent quantities needed
for a functioning program in a school. Many schools are
well beyond the basic stage, however, with some exceeding
the "advanced" state in their determination to achieve
excellence. It is anticipated that some schools, expec-
ially those experimenting with new approaches, may well
exceed the "advanced" stage in some categories and per-
haps fall behind in others. While such flexibility is
desirable, seminar participants and members of the
organization who have accepted these standards, emphasiz-
ed the need for a balanced program where materials,
equipment and personnel each make their unique and in-
tegrated contribution to the instructional program.

5. The Board of Directors of the Department of Audiovisual Instruction,
    NEA, at their meeting in Washington, D.C., October 31, accepted the
    quantitative guidelines formulated by the October 14-16, 1965 Sem-
    inar of the NDEA, Faris-Sherman Study.

6. On November 17, 1965, the Second Conference of the Study in the Development of Cooperative State Leadership in Educational Media, consisting of representatives of 38 state department commissioners and their audiovisual representatives, unanimously agreed to accept the amended Bloomington Seminar recommended standards of the Faris-Sherman Study.

7. The Quantitative Guidelines were accepted as standards by the Executive Committee of the Association of Chief State School Audiovisual Officers at their December, 1965, meeting in Chicago.

The Standards have been brought to the attention of accrediting associations for their use in evaluating schools. Meanwhile the study will continue with the case studies and other aspects of the report until its completion in September, 1966.

AUDIOVISUAL PERSONNEL - DEFINITIONS

1. <u>AV Co-ordinator:</u>

   The person in charge of the audiovisual program in a school building.

   For this person to have formal training in AV theory and methods would be highly desirable. He should at least be a certified teacher with interest in, enthusiasm for and experience with the audiovisual media.

   The school coordinator is a professional person and, as such, teachers should feel free to approach him for assistance in "audio-visualizing" their presentations. This should be one of the most important aspects of the school coordinator's job.

   Depending on the local situation the coordinator will be called on to perform a number of other functions. He will be generally responsible for the smooth functioning of the school's audiovisual program. He will coordinate the process of selecting and ordering materials, assist in materials preparation and carry out training sessions with and preventative maintenance on equipment. It will be his job to assure that materials and equipment are readily and easily available to the teachers.

   In these tasks he should be able to call on the assistance of a number of people. It should be understood that the AV Coordinator have access to clerical assistance.

   A school AV Coordinator cannot be expected to work at peak efficiency unless he can call on the supporting services of a technician and a system materials center. He will find that the sponsoring of a student AV Club while taking a significant amount of time, will provide a corps of trained assistants who can handle many of the details.

   There should be provision for increasing amounts of release time as the demands on the coordinator's services grow.

2. <u>AV Specialist:</u>

   The person in charge of the audiovisual program in a school system.

   This person should have a university degree or equivalent with at least some course work in AV theory and methods.

   The AV Specialist is responsible for the efficient operation of a school system's AV program. He performs many of the same functions for the system that the building coordinator performs in a single

school. Typically, he will have more of his time that will be
spent in administrative functions. One of his chief concerns will
be assisting school coordinators with their audiovisual programs.

3. A.V. Technician:

A person employed within a school system or a single building to
assist educators in various ways.

This person need not have experience in education but should know
how to carry out preventative maintenance on as many types of
equipment as possible and have some knowledge in at least one
aspect of materials preparation. A background which included
formal training in a technical institute or its equivalent would
be highly desirable.

Such institute training could be designed to prepare the technician
to assist teachers in gaining knowledge of proper equipment opera-
tion as well as in preparing teaching materials under the teacher's
direction. Photography, both still and motion picture graphic arts
and overhead transparency preparation would be three important
areas worthy of study.

4. A.V. Personnel employed by "co-operatives":

Chiefly for economic reasons it has been found desirable for some
school systems to hire personnel jointly. As long as the lines
of authority and responsibility are clearly defined this procedure
should work well in the case of A.V. specialists and system tech-
nicians.

PERSONNEL GUIDELINES

(ELEMENTARY AND SECONDARY EDUCATION)

In schools with 15 teachers or less ---- 1/2 time audiovisual specialist (specialists may serve more than 1 school)

In schools with 16 to 30 teachers ---- 1 full time audiovisual specialist

Add one audiovisual specialist for each additional 40 teachers or major fraction thereof

One, or the equivalent, semi-professional assistant (technician, graphic artist, clerk, photographer, etc.) for each 30 teachers.

In schools where audiovisual and library responsibility is combined (the instructional materials concept) the amount of staff required will be determined by adding the above audiovisual requirements to the personnel standards for libraries set by the American Library Association. It is recommended that the first specialist hired be an instructional materials specialist with training in both audiovisual instruction and librarianship.

Every multiple school district with at least one high school and four elementary schools shall employ a district or system audiovisual specialist.

MATERIAL AND EQUIPMENT GUIDELINES

To the DAVI guidelines make the following changes:

Page 1

16mm films: first paragraph should read -

"The films are to be owned by the school system or cooperative, and readily available to the schools involved. Caution must be exercised to insure that adequate provision is made to replace dated material."

	Basic	Advanced
	250	500
Filmstrips:	1 per 3	1 per student

Page 2 - no change

Page 3

| 16mm sound projector | 1 per school, per floor; or per 20 rooms | 1 per 10 teaching stations |

Delete 3 1/4 x 4 Projector Auditorium

Overhead Projector (10 x 10) (basic) - After 1 per 4 teaching stations, add "or per grade or per subject area".

Page 4

Radio-Receivers (basic) - change to 1 central sound outlet per room.

Page 5

Local Production Equipment - from Basic List delete:

    Dry Mount Press and Tacking Iron
    Polaroid camera
    35mm camera and accessories
    Film rewind
and add to Advanced List

Page 6 - same as page 3

Page 7 - same as pages 3 and 4, except:

TV receivers - Basic - should read "1 per grade"
Tape Recorders - Basic - should read "1 per 8"

Page 8 - Local production Equipment should read:

from Basic delete:

Dry Mount Press and Tacking Iron
16mm camera
Film rewind
and add to Advanced List.

MATERIALS GUIDELINES (ELEMENTARY AND SECONDARY)

	BASIC	ADVANCED
16mm films	The films are to be owned by the school system, unit, district, cooperative, etc., and readily available to the schools involved.	
	500 titles plus one additional film per each teaching station over 500 - with duplicates as needed	1000 titles plus one additional film per each teaching station over 1000 - with duplicates as needed
	OR	OR
	An average of 6 film rental bookings per teaching station per school year	An average of 12 film rental bookings per teaching station per school year
Filmstrip	1 per student per ADA the preceding year	1 1/2 per student per ADA the preceding year
Recordings - Tape and Discs exclusive of language lab materials	100 plus 2 per teaching station	300 plus 3 per teaching station

Due to the state of the field and the nature of certain media it is extremely difficult, if not impossible, to develop quantitative guidelines for all types of audiovisual materials. Even though quantitative guidelines are not recommended at this time for these materials, it must be recognized that they do make a unique contribution to the instructional program and must be made available for instructors' use. Each item listed must be supported with a fair share of the funds expended for media. The overall objective of the media program should be to provide a wide variety of audiovisual materials with no one item dominating the program.

8mm Films	Study Prints
2 x 2 Slides	Maps
3 1/4 x 4 Slides	Globes
Transparencies and Transparency	Dioramas

MATERIALS BUDGET

To provide for a well-rounded materials program it is recommended that the basic complement of films, filmstrips and recordings be considered capital equipment and be purchased with such funds. To provide for the on-going materials program, including maintenance and replacement but not expansion, no less than 1% of the average per pupil cost in the school unit should be spent per year per student. The 1% amount would include film rentals if no basic film collection is started and subscription television (i.e. MPATI), but would not include salaries, building construction or remodeling, CCTV installation, or electronic learning centers.

To provide for an advanced materials program the 1% figure should be increased to 1.5%

EQUIPMENT BUDGET

The capital expenditures necessary to secure the equipment recommended herein should be calculated from the price of the equipment. This figure will necessarily vary from school to school due to the range in equipment prices and the excellence of the equipment programs developed.

EQUIPMENT GUIDELINES (ELEMENTARY EDUCATION)

	BASIC	ADVANCED
16mm Sound Projector	1 per 10 teaching stations	1 per 5 teaching stations
8mm Projector	Should have one available for experimental purposes, but no specific guide-line at this time. Schools will have to acquire as the field develops and materials become available.	
2 x 2 Slide Projector	1 automatic projector per school	1 automatic projector per teaching stations
Filmstrip or Combination Filmstrip-Slide Projector	1 per 3 teaching stations	1 per teaching station
Sound Filmstrip Projector	Combine available filmstrip projector with existing record player or tape recorder	1 per building
3 1/4 x 4 Projector Overhead	1 per school district	1 per school building
3 1/4 x 4 Projector Auditorium	1 per auditorium	1 per auditorium
Filmstrip Viewer	1 per 3 teaching stations Also a quantity of viewers (1 per 3 teaching stations) should be available from a central source within the building for special project use or for individual study (school or home).	1 per teaching station
Overhead Projector (10x10) Classroom Type	1 per 4 teaching stations	1 per teaching station
Overhead Projector Auditorium Type	Appropriate number for large group instruction	

12

	BASIC	ADVANCED
	An auditorium model overhead merely implies that the machine utilized has sufficient light output and optical capabilities to project a satisfactory image in an auditorium type situation.	
Opaque	1 per building	1 per 6 teaching stations
TV Receivers	1 per class per TV channel at the grade level having the greatest number of sections - if programs are available	1 per teaching station if programs are available
Micro-Projector	1 per school	1 per 2 grade levels
Record Players	1 per teaching station K-3 1 per grade level 4-6	1 per teaching station plus earphones - for each - where listening stations are utilized 6-10 earphones needed
	1 set of earphones per each teaching station - where listening stations are utilized 6-10 earphones needed	
Tape Recorders	1 per 5 teaching stations	1 per 2 teaching stations with earphones as needed
Projection Carts	1 per portable piece of equipment purchased at the time the equipment is purchased	Permanent installation for projection purposes in each classroom
Light Control	Every classroom should have adequate light control. Adequate means the availability of facilities to control light to the extent that all types of projected media can be utilized effectively.	

	BASIC	ADVANCED
Video Tape Recorders	2 per school district would be desirable at present time for pilot programs. The state of this field is so dynamic that no specific recommendations can be made.	
Closed-Circuit TV	All new construction should include provisions for installation at each teaching station - older buildings should be wired for closed circuit television as need develops.	
Radio-Receivers	1 per school plus one battery type for emergency purposes	1 or more per building as is dictated by instructional needs plus central distribution system (AM-FM)
Projection Screens	One permanently mounted screen per classroom. 70 x 70 or larger with provision for eliminating keystoning. Large screen for auditorium or large group instructional area.	Additional portable screen of suitable size for individual and small group use
Local Production Equipment Per Building	Dry Mount Press and Tacking Iron Paper cutter Transparency Production Equipment Spirit Duplicator Primary Typewriter Polaroid camera 35mm cameras and accessories as needed Film rewind Film splicer (8-16mm) Tape splicer	Add to basic list: 8mm camera Second type of Transparency Maker Mechanical Lettering Copy camera and stand

EQUIPMENT GUIDELINES (SECONDARY EDUCATION)

	BASIC	ADVANCED
16mm Sound Projector	1 per 10 teaching stations	1 per 5 teaching stations
8mm Projector	1 per building	Number will necessarily have to be based on availability of film cartridges. There is a trend toward individual learning stations or independent study and additional equipment will be needed as program develops.

Significant changes are occurring in the 8mm medium which do not at present justify quantitative guidelines. Because of the important contribution of these films to individual and small groups learning, however, conservative quantities have been suggested. As equipment and materials become more stabilized and as sources expand, schools should increase the quantities beyond the amounts suggested in these guidelines.

	BASIC	ADVANCED
2 x 2 Slide Projector Automatic	1 per building	1 per 5 teaching stations
Filmstrip or Combination Filmstrip-slide Projector	1 per 10 teaching stations	1 per 5 teaching stations
Sound Filmstrip Projector	Combine available filmstrip projector with existing records player or tape recorder	1 per building
3 1/4 x 4 Projector (overhead)	1 per school district	1 per building
3 1/4 x 4 Projector (auditorium)	1 per auditorium	1 per auditorium

	BASIC	ADVANCED
Filmstrip Viewer	1 per 3 teaching stations	1 per teaching station
	Also a quantity of viewers (1 per 2 teaching stations) should be available from a central source within the building for special project use or for individual study (school or home).	
Overhead Projector (10x10) Classroom type	1 per 4 teaching stations	1 per teaching station
Overhead Projector (10x10) Auditorium type	Appropriate number for large group instruction	
	An auditorium model overhead merely implies that the machine utilized has sufficient light output and optical capabilities to project a satisfactory image in an auditorium type situation.	
Opaque	1 per building	1 per floor
TV Receivers	1 per department where programs are available	1 per 24 viewers in a classroom where programs are available
Micro-Projector	1 per school	1 per department where applicable
Record Players	1 per 10 teaching stations	1 per 5 teaching stations
Tape Recorders	1 per 10 teaching stations	1 per 5 teaching stations
Projection Carts	1 per portable piece of equipment purchased at the time the equipment is purchased	Permanent installation for projection purposes in each classroom

	BASIC	ADVANCED
Light Control	Every classroom should have adequate light control.	Adequate implies the availability of facilities to control light to the extent that all types of projected media can be utilized effectively.
Video Tape Recorders	2 per school district would be desirable at present time for pilot programs. The state of this field is so dynamic that no specific recommendations can be made.	
Closed-Circuit TV	All new construction should include provisions for installations at each teaching station, and older buildings should be wired for closed-circuit television as needs develop.	1 per 10 teaching stations
Radio Receivers (AM-FM)	3 per building 1 per building should be battery operated. 1 set all-wave for language use.	
Projection Screens	One permanently mounted screen per classroom. No smaller than 70 x 70 with keystone elimination. Screen for auditorium and/or large group instructional area.	One permanently mounted screen per classroom plus portable screens as needed. Permanent screen no smaller than 70 x 70 with keystone elimination. Screen for auditorium and/or large group instructional area.
Local Production Equipment per building	Dry Mount Press and Tacking Iron Paper Cutter Transparency Production Equipment 16mm camera 8mm camera Rapid Process camera Equipped Darkroom Spirit Duplicator Primary Typewriter Copy camera and stand Light Box 35mm Still Camera Film Rewind Film Splicer (8mm and 16mm) Tape Splicer	Add to basic list: Slide Reproducer Second type of Transparency Production Equipment Mechanical Lettering

PERSONNEL GUIDELINE (HIGHER EDUCATION)

One full-time audiovisual director with supporting staff as needed as program develops. Director, might add personnel in the areas of administration, graphics, film production, ITV, teaching, etc. Start with full-time secretary and add secretarial help as needed.

Many colleges are creating materials centers and consequently the audiovisual program will become a part of this larger organizational pattern. Where this is happening, it should be stressed that the recommendations concerning personnel remain the same with the possible addition of a director of the total materials program who could be an audiovisual communications specialist.

MATERIALS GUIDELINES (HIGHER EDUCATION)

BASIC	ADVANCED
16mm films	500 college level titles plus 2 per instructor over 500. In addition, teacher education institutions should have the basic film collections recommended for elementary and secondary schools (1,000)	1,000 college level titles plus 3 per instructor over 500, plus elementary and secondary basic collection in teacher education institutions.
	OR	OR
	An average of 3 film rentals per instructor per course.	An average of 5 film rentals per instructor per course
Filmstrips	2,000 titles with duplicates as needed	3,000 titles with duplicates as needed
Recordings - Tape and Disc but not electronic lab materials	1,000	2,000

Due to the state of the field and the nature of certain media it is extremely difficult, if not impossible to develop quantitative guidelines for all types of audiovisual materials. The list below

BASIC

includes some of these materials. Even though quantitative guidelines are not recommended at this time for these materials, it must be recognized that they do make a unique contribution to the instructional program and must be made available for instructors' use. Each item listed must be supported with a fair share of the funds expended for media. The overall objective of the media program should be to provide a wide variety of audiovisual materials with no one item dominating the program.

8mm films	3 1/4 x 4 Slides	Study Prints
2 x 2 Slides	Transparencies and Transparency Masters	Maps

ADVANCED

Globes
Dioramas

MATERIALS BUDGET

To provide for a well-rounded materials program it is recommended that the basic complement of films, filmstrips and recordings be considered capital equipment and be purchased with such funds. To provide for the on-going materials program, including maintenance and replacement but not expansion, no less than 1% of the average per pupil cost in the school unit should be spent per year per student. The 1% amount would include film rentals if no basic film collection is started and subscription television (i.e. MPATI), but would not include salaries, building construction or remodeling, CCTV installations, or electronic learning centers.

To provide for an advance materials program the 1% figure should be increased to 1.5%.

EQUIPMENT BUDGET

The capital expenditures necessary to secure the equipment recommended herein should be calculated from the price of the equipment. This figure will necessarily vary from school to school due to the range in equipment prices and the excellence of the programs developed.

EQUIPMENT GUIDELINES (HIGHER EDUCATION)

	BASIC	ADVANCED
16mm Sound Projector	1 per 12 teaching stations (Multipurpose institutions) 1 per 8 teaching stations (Single purpose institution)	1 per 8 teaching stations 1 per 5 teaching stations
8mm Sound Projector	1 to 3 sound projectors per institution	1 per 10 teaching stations
2 x 2 Slide Projector (Automatic)	1 per 10 teaching stations	1 per 6 teaching stations
Filmstrip or Combination Filmstrip-Slide Projector	1 per 10 teaching stations	1 per 5 teaching stations
Sound Filmstrip Projector	1 per 15 teaching stations	1 per 10 teaching stations
3 1/4 x 4 Projector (Auditorium)	2 per auditorium	1 per auditorium plus arc or similar power
Filmstrip Viewer	5 to 10 at each filmstrip depository	10 to 20 at each filmstrip depository

Significant changes are occurring in the 8mm medium which do not at present justify quantitative guidelines. Because of the important contributions of these films to individual and small group learning, however, conservative quantities have been suggested. As equipment and materials become more stabilized and as sources expand, schools should increase the quantities beyond the amounts suggested in these guidelines.

It is assumed that viewers will be available for individual use at the depositories. As this activity increases additional viewers should be secured.

	BASIC	ADVANCED
Overhead Projector (10x10) Classroom Type	1 per 4 teaching stations	1 per teaching station
Overhead Projector (10x10) Auditorium Type	Appropriate number for large group instructional areas	An auditorium model overhead merely implies that the machine utilized has sufficient light output and optical capabilities to project a satisfactory image in an auditorium type situation.
Opaque	3 to 6 per institution	8 to 12 per institution
TV Receivers	1 per each 24 viewers where programs available (or projection TV as needed)	1 per teaching station but no more than 24 viewers per set
Record Players	1 per 25 teaching stations	1 per 15 teaching stations
Tape Recorders	1 per 5 teaching stations	1 per 2 teaching stations
Projection Carts	1 per 3 to 6 pieces of equipment	1 per 2 to 4 pieces of equipment
Light Control	Every classroom should have adequate light control. Adequate in this situation means that light can be controlled to the extent that all types of projected media can be utilized effectively.	
Video-Tape Recorders	1 per institution	1 per TV production unit
Closed-Circuit TV	1 studio per institution capable of distribution of programming to each teaching station.	Many institutions may desire portable closed-circuit units for specialized use. Where this is the case, the portable units should be secured in addition to the basic recommendations noted above.

	BASIC	ADVANCED
Radio-Receivers (AM-FM)	3 available to central location	Equivalent of 1 per classroom building
Projection Screens	1 per teaching station (at least 70 x 70) with provision for keystone elimination plus 1 portable screen per building. Suitable screen for auditorium - large or small group use.	
Electronic Learning Lab	1 lab per institution	As programs dictate
Local Production Equipment	Dry Mount Press and Tacking Iron Paper Cutter Transparency Production Equipment 16mm Camera 8mm Camera 35mm Still Camera Rapid Process Camera Equipped Darkroom Spirit Duplicator Primary Typewriter Copy Camera Light Box Film Rewind Film Splicer Tape Splicer	Add to basic list: Slide Reproducer Second Type of Transparency Producer Mechanical Lettering

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